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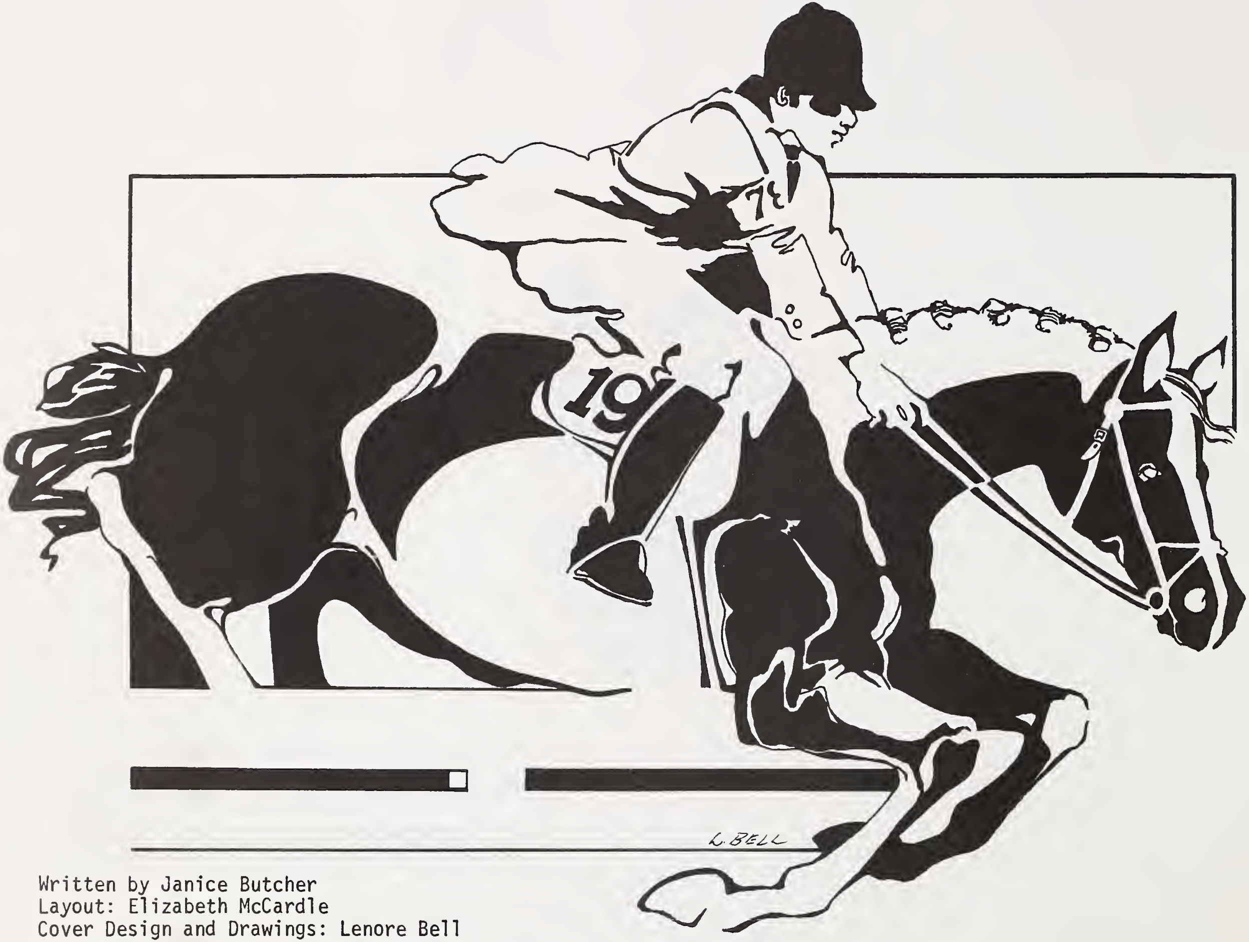

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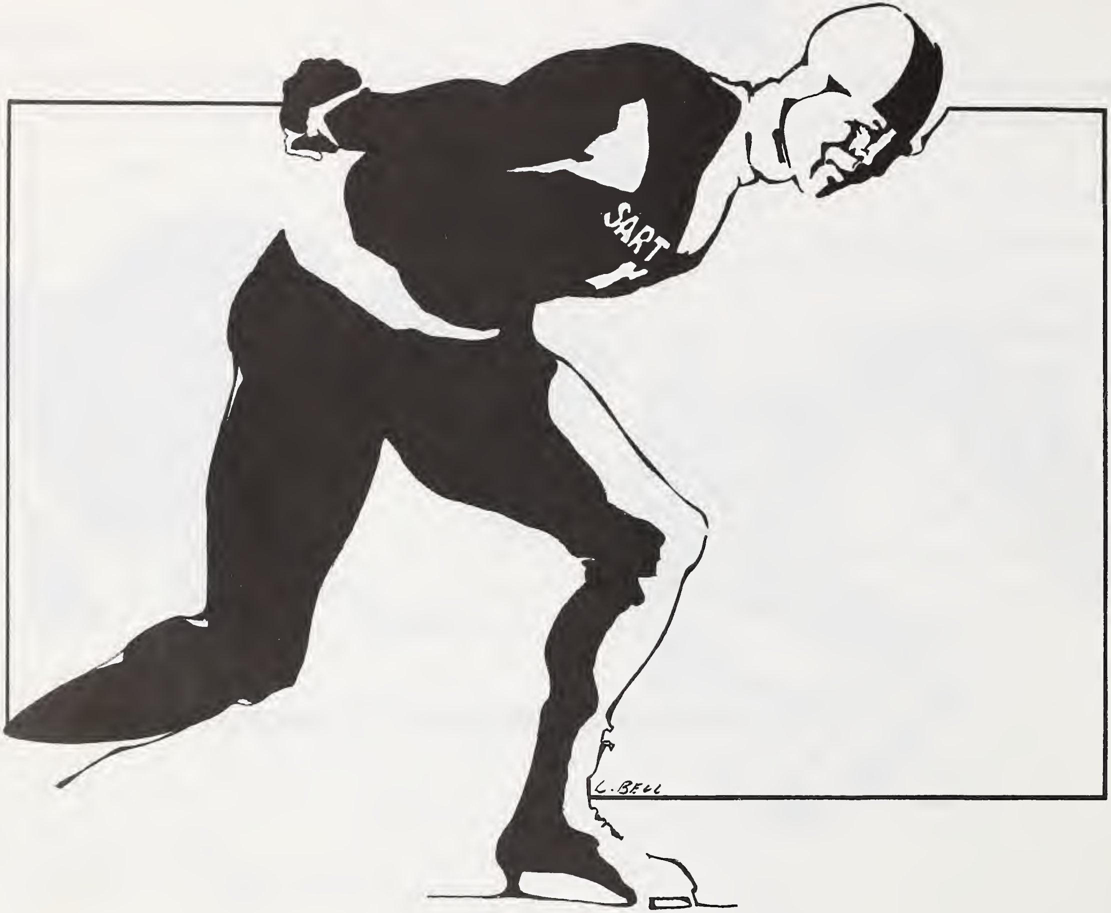
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Rationale for the Sports Festival Curriculum Guide

The major purpose of this curriculum guide is to enrich present physical education programs by incorporating and using the concept of a sports festival. In 1977 and 1978 the focus will be on the Commonwealth Games to be held in Alberta in the summer of 1978, but the same concepts and ideas could be used in subsequent years focusing on any sports festival. To the above end, the following subpurposes are proposed for the guide:

1. To present a model of a sports festival which can be applied specifically to the 1978 Commonwealth Games or generally to any sports festival such as:

   Olympics - Summer and Winter Games
   Pan American Games
   Canada Summer and Winter Games
   Alberta Summer and Winter Games
   National and Provincial Championships
   School Championships

2. To present ideas for implementing a sports festival in a school.

3. To present concepts which apply to all sport festivals and which could be included in junior and senior high physical education programs.

4. To present generalizations, objectives, suggested activities and resources for each concept in order to assist physical education teachers in implementing the concept of a sports festival into their programs.

Introduction to the Guide

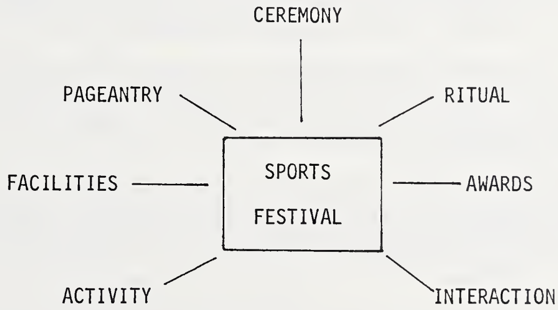
This curriculum guide has been written with the sincere hope that it will be a useful and practical guide for Alberta junior and senior high physical education teachers in planning their programs in this Commonwealth Games year and in any sports festival year. To this end, then, the guide can be used in two different ways--by concept or by objective. The body of the guide is organized using the conceptual approach. The concepts are based primarily on Jewett's Key Purpose Concepts for physical education. An explanation of both the conceptual approach and Jewett's concepts follow and should prove helpful in using the guide. A sample lesson using the conceptual approach is included in Appendix A. Teachers who prefer to plan their programs by objectives can do so by consulting the outline of objectives.

The body of the guide contains many suggested learning activities for junior and senior high students. Many of these can be used in programs across Alberta or at least will help to trigger additional ideas on the part of physical education teachers. Grade levels have not been assigned to specific activities for two reasons. First, because a sports festival curriculum might be used for only a limited amount of time prior to and immediately following a specific sports festival, either in this Commonwealth year or in any sports festival year, it was felt many of the ideas would cut across grade levels. Also, it was felt that individual physical education teachers would be the best judges of appropriate activities for their classes.

Many individual student research-type projects have been suggested. Students could not realistically complete all of these projects but each student could attempt one or two projects of particular interest to him/her. Physical education is meant primarily to be education through and of the physical, that is through activity, and classes should be as active as possible. However, a great deal can also be gained through reading, discussion, and class and individual projects, and it is felt that teachers will add greater depth and increased understanding to their programs by including some of these projects. This type of activity has been included with this thought in mind, not with the idea of changing physical education into an academic sedentary subject.

Many of the activities could be very valuable after the particular sports festival is over. A follow-up unit the following year might prove very beneficial. The guide is designed to be used for any sports festival, big or small, from the Olympics to a school track meet. Also, all of the concepts and suggested learning activities could become a part of the regular physical education curriculum. After all, the concepts outlined are the key purposes for physical education in schools.

Model for a Sports Festival



SPORT: A UNIFYING FORCE IN SOCIETY

A sports festival is any gathering of people for the purposes of participating in sports activities. It could range from the Olympics to the British Commonwealth Games to the Alberta Summer Games to a school track meet. All sports festivals, big or small, have several elements or concepts in common, as depicted in the above model.

1. Activity: The central element and the purpose for a sports festival is the activity. This includes not only the sports activities but the cultural activities as well - art, music and drama presentations of the host country or community.

2. Interaction: Sport can serve as a unifying force in society because interaction is an integral part of any sports festival - interaction among teammates, interaction with opponents, interaction among spectators. Through this interaction, the goals of communication, cooperation, competition and leadership can be realized.

3. Facilities: Any sports festival requires facilities for the various competitions. These facilities should be available for community use after the sports festival is completed and should be planned with this objective in mind. Also every community has facilities, and students should be made aware as much as possible of the facilities, programs and activity opportunities in their own communities.

4. Pageantry: Big or small, any sports festival can include pageantry to add to the colour, excitement and meaningfulness of the occasion. Pageantry involves the marching of the competing teams or countries, the displays of national or team costumes and flags.

5. Ceremony: Again, the opening and closing ceremonies of a sports festival contribute to the meaningfulness of the occasion. They can be very emotional, stirring events and tend to integrate both the competing teams and the spectating public. The awards ceremonies honour the winning participants and are a testimony to their excellence and achievement.

6. Ritual: Through the history of a particular sports festival, rituals or traditions grow up from significant past events and become an expected part of the festival. Examples of rituals are the running of the torch from the previous site of the festival to the present site, the flame burning throughout the festival, the exact distance for the marathon, and the traditional handshake before and after competition.

7. Awards: The awards given at a sports festival are the material rewards for excellence and achievement and are lasting mementoes of the competitors' winning performances.

Suggestions for Implementation of a Sports Festival in a School

A school sports festival can either be a school project with all subject areas and all teachers participating, or just a physical education project with the physical education staff offering the leadership. The former method would be ideal as a culmination of a sports festival unit (in 1977-78, a Commonwealth Games unit). The following is a suggested list of topics that could be covered in various subject areas:

Social Studies - geography, history, economics of the nations
English - literature of the nations
Sociology/Social Science - politics, race, values
Fine Arts - culture of selected countries - music, art, crafts, drama
Biology - physiology of exercise related to sport participation
Household Economics - costumes, dress, food

Mathematics - metric system
Physics - mechanical principles of sport participation
Physical Education - see curriculum guide

A school sports festival can be as big or as small as the individual circumstances dictate. The important thing is that students help with the planning and preparation for the festival, and that as many students as possible actually participate. The two focal points would be the cultural activities of the competing countries, and the sport activities.

A. Suggestions for the Cultural Activities of a School Sport Festival

1. The school could be divided into different countries by home room, subject area, grade, house (if an intramural house system exists), or some other convenient unit.

2. The countries would compete as a unit in the actual sport activities but would also be responsible for displays of their countries' culture and way of life. These displays could be centred in individual classrooms or in different sections of the gymnasium. Suggested displays:

   a. Pictures, maps, artifacts, etc. of the countries' geography, resources and industries, history - see Social Studies Curriculum.
   b. Pictures and samples of ethnic costumes.
   c. Crafts, art.
   d. Samples of foods and drinks.
   e. Films or actual displays of dances and drama.
   f. Records playing national songs and music.

3. The school could have a concert with each country displaying its music, drama, and dance. Parents could be invited to this concert and also look at the other displays either before or after the concert.

B. Suggestions for the Sport Activities of a School Sport Festival

1. The activities could be actual competitions of the sports of the particular sports festival being studied (Eg. Commonwealth Games, Olympics) with official rules, judging, elimination tournaments, etc., or some alternative method of participation could be used:

   a. Tabloid meet: Every student who participates earns points for his/her country in accordance with the performance.

Eg. Track Meet: High jump - participant jumps 3'6" - 1 point
3'8" - 2 points
3'10"- 3 points
4'0" - 4 points
Cycling Meet: participant completes course in 10 minutes - 1 point
9 minutes - 2 points
8 minutes - 3 points
7 minutes - 4 points
Wrestling Meet: in a round robin tournament, 1 point for every bout won.

b. Participation meet: Every student earns points for his/her country in accordance with the number of events he/she participates in, regardless of the performance.
Eg. Track Meet: participates in 3 events - 3 points
Badminton Tournament: participates in 4 games - 4 points

2. Committees of students could be responsible for different elements of the sports festival:

a. Activity - actual organization of the competitions (see Subconcept 18. C. Organization, page 54.) The sports festival simply could be a single event, a track meet, gymnastics meet, etc., or could include several sports occurring simultaneously, or on different days.
b. Facilities and equipment.
c. Pageantry - Each competing country or unit could be responsible for its own flags and costumes for the marchin during the opening and closing ceremonies but a committee should be in charge of organizing the marchin. Throughout the competitions the flags could be displayed, team uniforms worn (some distinguishing feature), and songs and cheers given.
d. Ceremony - A committee would be in charge of the opening and closing ceremonies, and the medal ceremonies. Perhaps national anthems of the competing countries could be played.
e. Ritual - Arrangements could be made to have a torch run from a significant place (town hall, another town) to the school and have a flame lit for the festival.
f. Awards - Awards can be as elaborate or as simple as the school can afford.
Some ideas: 1. Medals made of different coloured construction paper
2. Different coloured ribbons
3. Medallions with home-made ribbons
An awards podium could be constructed for the occasion.
g. Interaction - A committee could be responsible for some non-sporting events. Perhaps the concert mentioned above or a folk dance jamboree - teaching folk dances to the entire school in the middle of the football field - mass participation - all that would be needed would be a PA system and a raised platform so everyone could see the instructor.

C. Suggestions for Ongoing Yearly Activities Connected with the Sports Festival

1. Organize the intramural program with the competing units being countries participating in the sports festival. Flags of the competing countries could be displayed around the gymnasium for the entire year.

2. Keep a bulletin board of articles and pictures from newspapers and magazines to show the progress of the games - the year before the games, during the games, and reaction following the games.

3. The cafeteria or a fund raising group in the school could highlight a different country's national food once a month.

4. Clubs and organizations in the school could have special projects:
   a. Students' council - adopt a child from a competing country, offer to assist with some aspect of the real sports festival.
   b. Debating club - debate current issues relating to the sports festival or sport in general.
   c. Drama club - present plays of the competing countries.

The Conceptual Approach

This curriculum guide is written using the conceptual approach. A brief explanation of this approach is presented here.[1]

> Knowledge is useful only to the extent that it finds expression in human behavior. The kinds of knowledge which are likely to have the greatest influence on human behavior are the "big ideas" which we call concepts and generalizations.
>
> A concept is an abstraction - an idea generalized from particular cases, a word or phrase which denotes a category of information or simply an understanding or notion of some thing, some person, some idea.
>
> A generalization is a statement which expresses relationship between two or more concepts; a statement of fact which is true in more than one situation; a statement which is generally true.

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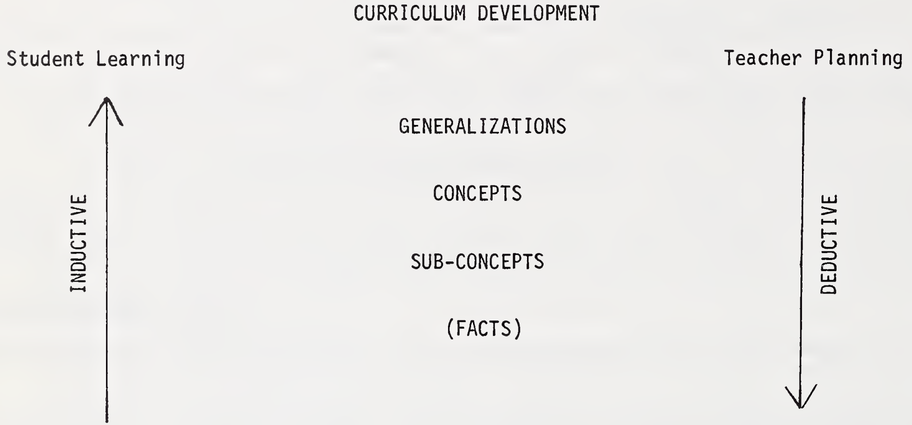
[1] Alberta Education. Alberta Business Education Program and Curriculum Guide. Edmonton: The Department of Education, 1973.

Concepts and generalizations may be used to symbolize vast amounts of information. They differ from facts in that they are transferable from one setting to another. They are more easily remembered and are less subject to obsolescence.

Curriculum committees, when organizing a body of knowledge, use either the inductive or deductive method. The diagram below may help to explain the relation that exists between the elements of a body of knowledge.[2]



Facts and sub-concepts are taken to be items of specific information; concepts are categories of information, and generalizations express the relationship between concepts. In planning a lesson, the teacher moves down this hierarchy whereas in learning, the student begins with facts and moves upward.

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2. Alberta Education. Curriculum Guide for Secondary School Home Economics. Edmonton: The Department of Education, 1972.

Jewett's Concepts in Physical Education[4]

All growth in understanding takes place through the use of significant concepts. Dr. Patricia Austin from the University of Alberta, recommended a conceptual structure of physical education for school programs. Austin stated that:

> "There is a critical need to identify and organize the content of physical education into a comprehensive structure to provide students with the knowledge and understanding of physical activity needed to live effectively in today's society...the organization of physical education around the basic and unifying concepts of physical activity into a conceptual structure was an effective basis from which to design the school program in physical education."[3]

Jewett[5] also suggested that a conceptual framework of human movement purposes may serve as the basis for defining the scope or content of physical education. The Purpose Process Curriculum Framework developed by Jewett and her colleagues, is postulated on the premise that each individual may seek meaning through any combination of the following movement goals:

1. Man moves to be aware of and control his body.
2. Man moves to develop movement skills to modify, adapt to, and control the physical environment.
3. Man moves to communicate and interact in a social environment.

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3. Austin, Patricia. "Bridging the Gap Between Theory and Practice", Health and Physical Education Bulletin, VIII(1): 4 - 17, 1968.

4. Department of Education, Government of Alberta. "Proposed Material for Secondary Physical Education Program of Studies for Junior and Senior High Schools", 1977.

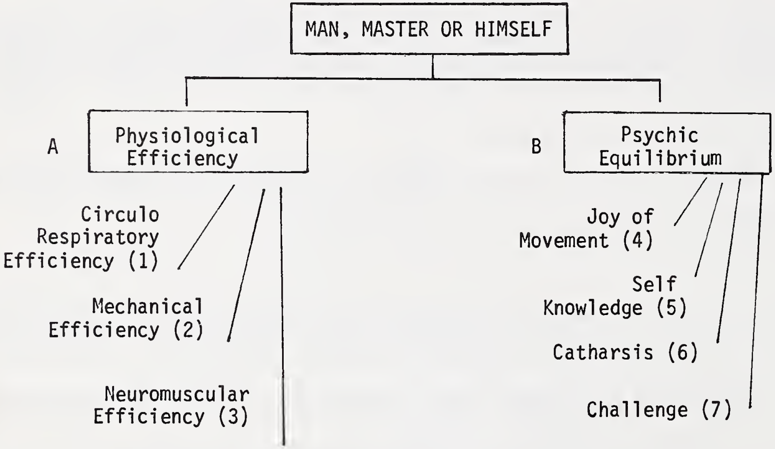
5. Jewett, Ann E. "Aims and Objectives of Physical Education: Subject Matter and Research Methods of Sport Pedagogy as a Behavioral Science", A paper presented to the International Symposium of Sport Pedagogy, Karlsrule, Federal Republic of Germany, October 2, 1975.

The following key purpose concepts for physical education, developed by Jewett, include most of the concepts used in this guide. Subconcepts have been included for most of the concepts and a few additional concepts directly related to sports festivals have been added.

NOTE: A sample of a lesson using the conceptual approach is given in Appendix A.

KEY PURPOSE CONCEPTS[6]

I. MAN, MASTER OF HIMSELF - Man moves to fulfill his human developmental potential.



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6. Jewett, Ann E., Curriculum Design: Purposes and Processes in Physical Education Teaching-Learning. Washington, D.C., American Alliance for Health, Physical Education, and Recreation, 1976.

A. Physiological Efficiency: Man moves to improve or maintain his functional capabilities.

1. Circulo-Respiratory Efficiency. Man moves to develop and maintain circulatory and respiratory functioning.

2. Mechanical Efficiency. Man moves to develop and maintain range and effectiveness of motion.

3. Neuro-Muscular Efficiency. Man moves to develop and maintain motor functioning.

B. Psychic Equilibrium: Man moves to achieve personal integration.

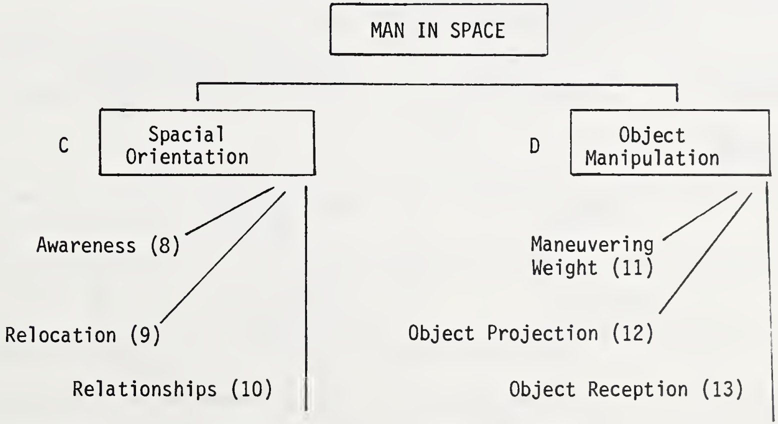
4. Joy of Movement: Man moves to derive pleasure from movement experience.

5. Self-knowledge: Man moves to gain self-understanding and appreciation.

6. Catharsis. Man moves to release tension and frustration.

7. Challenge. Man moves to test his prowess and courage.

II. MAN IN SPACE: Man moves to adapt to and control his physical environment.



C. Spacial Orientation: Man moves to relate himself in three dimensional space.

8. Awareness. Man moves to clarify his conception of his body and his position in space.

9. Relocation. Man moves in a variety of ways to propel or project himself.

10. Relationships. Man moves to regulate his body position in relation to the objects or persons in his environment.

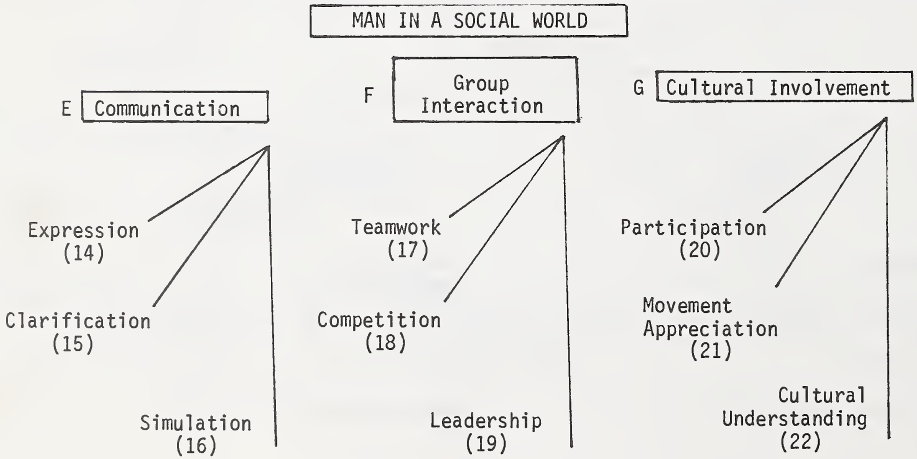
D. Object Manipulation: Man moves to give impetus to and to absorb the force of objects.

11. Maneuvering Weight. Man moves to support, resist or transport mass.

12. Object Projection. Man moves to impart momentum and direction to a variety of objects.

13. Object Reception. Man moves to intercept a variety of objects by reducing or arresting their momentum.

III. MAN IN A SOCIAL WORLD: MAN MOVES TO RELATE TO OTHERS



E. Communication: Man moves to share ideas and feelings with others.

  14. Expression. Man moves to convey his ideas and feelings.

  15. Clarification. Man moves to enhance the meaning of other communication forms.

  16. Simulation. Man moves to create an advantageous image or situation.

F. Group Interaction: Man moves to function in harmony with others.

  17. Teamwork. Man moves to cooperate in pursuit of common goals.

  18. Competition. Man moves to vie for individual or group goals.

  19. Leadership. Man moves to motivate and influence group members to achieve common goals.

G. Cultural Involvement: Man moves to take part in movement activities which constitute an important part of his society.

  20. Participation. Man moves to develop his capabilities for taking part in movement activities of his society.

  21. Movement Appreciation. Man moves to become knowledgeable and appreciative of sports and expressive movement forms.

  22. Cultural Understanding. Man moves to understand, respect, and strengthen the cultural heritage.

Guide for Use of the Manual

1. Two outlines have been compiled:

   A. Outline of concepts - includes 22 concepts with their related subconcepts. Page numbers on which each can be found are included.

   B. Outline of objectives - includes 11 general instructional objectives for using the sports festival concept in the physical education curriculum.

2. If interested in a particular CONCEPT, consult the outline of concepts for appropriate page numbers.

3. If interested in a particular OBJECTIVE, consult the outline of objectives and turn to the concepts and subconcepts listed.

Outline of Concepts

Page
1. Sports Festival 20
2. Circulo - Respiratory Efficiency . . . 22
    A. Aerobics 22
    B. Anaerobics 24
3. Mechanical Efficiency 26
    A. Force 26
        a. Application
            i Range of motion
            ii Leverage
        b. Reception
    B. Time 28
    C. Stability 30
    D. Rotation 30
    E. Buoyancy 30
    F. Resistance (in water) 32
    G. Propulsion (in water) 32
4. Neuromuscular Efficiency 34
    A. Muscular Strength 34
    B. Muscular Endurance 36
    C. Flexibility 36
    D. Balance 38
    E. Speed 38
    F. Power 38
    G. Coordination 38
    H. Reaction Time 38
    I. Agility 38
5. Joy of Movement 40
6. Self Knowledge 40
7. Catharsis 42
8. Challenge 42
9. Awareness 44
10. Relocation 44
11. Relationships 44
    A. Space 44
        a. Opponents
        b. Boundaries
    B. Objects 46

Page
12. Maneuvering Weight 46
13. Object Projection 48
    A. Application of Force 48
    B. Direction of Force 48
14. Object Reception 50
    A. Reception of Force 50
15. Communication 50
    A. Friendliness - Interaction 50
    B. Peace-Goodwill 50
    C. Sportsmanship - Contemporary Issues of Sport 50
16. Teamwork - Cooperation 52
    A. Participants 52
    B. Community 52
    C. Governments 52
17. Competition 52
    A. Excellence 52
18. Leadership 54
    A. Coaching 54
    B. Officiating 54
    C. Organization 54
19. Participation 56
20. Movement Appreciation - Spectatorship 58
    A. Knowledge of Rules and Officiating 58
    B. Knowledge of Skills 58
    C. Knowledge of Tactics and Strategy 60
    D. Knowledge of Performers and Performances . . . 60
    E. Knowledge of Competition Organization 60
    F. Knowledge of Etiquette and Rituals 62
    G. Knowledge of History and Development of Sports 62
21. Cultural Understanding 62
    A. Folk Dances 62
    B. National Games 64
22. Facilities 64
    A. Commonwealth Games 64
    B. Local Community 64

Outline of Objectives and Applied Concepts

The following are some general instructional objectives for a sports festival curriculum. Specific and detailed behavioral objectives are included with each concept. Following each objective are listed the concepts and subconcepts which could be used to achieve the stated objectives.

1. The students will understand the components of a sports festival, and will plan for and participate in a sports festival.

Page

CONCEPT 1. Sports Festival 20

2. The students will become more knowledgeable spectators of the 1978 Commonwealth Games and other sport festivals.

Page

CONCEPT 20. Movement Appreciation - Spectatorship 58

A. Knowledge of rules and officiating
B. Knowledge of skills
C. Knowledge of tactics and strategies
D. Knowledge of performers and performances
E. Knowledge of competition organization
F. Knowledge of etiquette and rituals
G. Knowledge of history and development of sports

3. The students will actually participate in the sports of the Commonwealth Games and/or other similar sports depending on individual school's facilities and equipment.

Page

CONCEPT 19. Participation 56
CONCEPT 5. Joy of Movement 40
CONCEPT 6. Self Knowledge 40
CONCEPT 7. Catharsis 42
CONCEPT 8. Challenge 42

4. The students will understand the mechanical and spatial concepts of sports participation and be able to apply them in their own participation and in the spectatorship of specific sports.

Page

CONCEPT 3. Mechanical Efficiency 26

A. Force
  a. Application
  b. Reception

Page

CONCEPT 3. (cont.)
- B. Time
- C. Stability
- D. Rotation
- E. Buoyancy
- F. Resistance (in water)
- G. Propulsion (in water)

CONCEPT 9. Awareness 44
CONCEPT 10. Relocation 44
CONCEPT 11. Relationships 44
- A. Space
- B. Objects

CONCEPT 12. Maneuvering Weight 46
CONCEPT 13. Object Projection 48
- A. Application of force
- B. Direction of force

CONCEPT 14. Object Reception 50
- A. Reception of force

5. The students will understand the importance of the various components of physical fitness in preparing for and competing in international athletic competition, and how the various components are developed.

Page

CONCEPT 2. Circulo-respiratory efficiency 22
- A. Aerobics
- B. Anaerobics

CONCEPT 4. Neuromuscular efficiency 34
- A. Muscular strength
- B. Muscular endurance
- C. Flexibility
- D. Balance
- E. Speed
- F. Power
- G. Coordination
- H. Reaction Time
- I. Agility

6. The students will understand the components of excellence in athletic competition.

Page

CONCEPT 17. Competition 52
A. Excellence

7. The students will understand the importance of the various components of physical fitness for their own health and participation in physical activities and will actually experience a training effect.

Page

CONCEPT 2. Circulo-respiratory efficiency 22
CONCEPT 4. Neuromuscular efficiency 34

8. The students will understand and experience aspects of the physical culture of the countries competing in the particular sports festival.

Page

CONCEPT 21. Cultural Understanding 62
A. Folk dances
B. National sports

9. The students will appreciate the interaction that occurs at a sports festival, and will understand the values and/or issues that are pertinent to sports festivals and to contemporary sport in general.

Page

CONCEPT 15. Communication 50
A. Friendliness - Interaction
B. Peace and Goodwill
C. Sportsmanship - Contemporary Issues of Sport

10. The students will understand the cooperation and teamwork that are necessary both in preparing for a sports festival and in competing in a sports festival.

Page

CONCEPT 16. Teamwork - Cooperation 52
A. Participants
B. Community
C. Governments

11. The students will understand the leadership necessary at all levels to develop a sports festival.

Page
CONCEPT 18. Leadership 54
  A. Coaching
  B. Officiating
  C. Organization

12. The students will be aware of the facilities being developed for the specific sports festival, and will know the facilities and programs available in their own communities for personal use.

Page
CONCEPT 22. Facilities 64
  A. Commonwealth Games
  B. Local Community

Concepts

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
1. Sports Festival		a. The more understanding of the concept of a sports festival, the greater will be the appreciation of its role in society, and the greater the enjoyment derived from operating such an event.	The students will be able to: a. identify the elements of a sports festival b. recognize and appreciate the elements of a sports festival in any festival they watch c. plan for a sports festival in their own school and/or community d. participate in a sports festival in their own school and/or community

SUGGESTED ACTIVITIES

1. Have students discuss the concept of a sports festival and evaluate its usefulness and relevance in today's society:
   - What are the values of a sports festival - athletic, cultural, social, political, economic?

2. Have students list other sport festivals they have attended, observed on television, or heard about:
   Olympics
   Pan American Games
   Canada Summer and Winter Games
   Alberta Summer and Winter Games
   National and Provincial Championships
   School Championships
   What immediate and long-lasting benefits did they have for the host community, province and nation?

3. Present the model of a sports festival outlined here and have students evaluate its usefulness.

4. Have students plan and prepare for their own sports festival.

5. Have students participate in a sports festival.

RESOURCES

Sports Festival Resources - Page 71

Model for a sports festival - Page 3

Suggestions for Implementation of a Sports Festival - Page 4

Social Studies Curriculum Guide

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
2. Circulo-Respiratory Efficiency - man moves to develop and maintain circulatory and respiratory functioning	A. AEROBICS	a. The greater the maximum oxygen consumption of a performer, the longer and more efficiently he can perform physical activities. b. The more the circulo-respiratory system is subjected to greater than normal loads, the more it will adapt and increase in efficiency.	The student will be able to: a. describe how oxygen is transported to the working muscle cells b. describe how physical training improves maximum oxygen consumption c. describe why physical training improves maximum oxygen consumption through the progressive overload principle d. identify different methods of circulo-respiratory training and the common elements of each e. assess personal circulo-respiratory fitness levels f. participate in an individually planned fitness program g. experience a training effect h. identify how different physical activities contribute to circulo-respiratory fitness i. appraise the benefits of circulo-respiratory fitness for daily health and living j. appraise the importance of circulo-respiratory fitness for athletic performances

SUGGESTED ACTIVITIES

1. Discussions on simplified physiology of exercise: delivery of oxygen to the muscles - how training improves circulo-respiratory function. Why training improves circulo-respiratory function - progressive overload principle (Good reference - Cooper's Aerobics).

2. Assess each student's personal circulo-respiratory fitness with Cooper's 12-minute run/walk test.

3. Have students participate in a number of different training methods and discuss the common elements of each:
    - Fartlek
    - Parlauf
    - Interval running
    - Repetition running
    - Continuous running
    - Resistance running

4. Have students design a personal fitness program and record their progress for a month or longer.

5. To assess the contributions of different activities, have students perform a number of activities for five minutes each. Take the pulse rate at the end of each to rank the activities on contribution to circulo-respiratory performance.

6. Have a well-known athlete speak to the class on his/her training methods and discuss the importance of circulo-respiratory fitness for athletic performance.

7. Have students prepare a paper comparing Eastern bloc and Western methods of training.

8. Have a doctor speak to the class on the physiology of circulo-respiratory fitness and its importance in daily living.

9. Field trip to a university or fitness centre where circulo-respiratory fitness testing is carried on.

10. Have students compare their own fitness program with that of an international athlete and try to explain the differences in performance.

11. Have students evaluate the sports of the sports festival in terms of circulo-respiratory fitness.

12. Have students evaluate their own expected lifetime activities in terms of circulo-respiratory fitness.

RESOURCES

Circulo-Respiratory Efficiency Resources — Page 73

Transparencies of Circulo-Respiratory System
- heart, lungs, veins, arteries, cellular respiration.

Cooper's 12-minute walk/run norms.

Personal file (chart) on each student's personal progress in fitness.

Guest lecturers - well known athlete, doctor.

CONCEPT	SUBCONCEPTS	GENERALIZATIONS	OBJECTIVES
2. Circulo-Respiratory Efficiency	B. ANAEROBICS	a. The more aerobic metabolism and the less anaerobic metabolism that occurs, the longer a performer can work at maximum capacity.	The students will be able to: a. outline the difference between aerobic and anaerobic metabolism
		b. The more oxygen that can be supplies to the working muscles, the less anaerobic metabolism that occurs.	b. describe why acrobic metabolism enables a performer to work longer than anaerobic metabolism
		c. The more anaerobic metabolism that occurs, the more lastic acid buildup and the sooner muscles tire.	c. identify what activities require anaerobic metabolism
		d. The more anaerobic metabolism that occurs, the more oxygen debt to be repaid and the longer the recovery period.	d. explain why recovery rate is an indication of maximum oxygen consumption

SUGGESTED ACTIVITIES	RESOURCES
1. Discussions on anaerobic metabolism and other related concepts - lactic acid, oxygen debt, recovery.	Circulo-Respiratory Efficiency Resources — Page 73
2. Have students experience the effects of lactic acid and anaerobic metabolism by continuously moving a body part (Eg. finger, arm) until it cannot move any longer.	
3. Have students experience the effects of exercise on heart rate by taking resting heart rates, heart rates after mild exercise (Eg. walking up a flight of stairs), and heart rates after strenuous exercise (Eg. running up 3-4 flights of stairs.)	
4. To show differences in recovery rate, have the class run 400 metres and take heart rates at one-minute intervals. Determine how long it takes each student to return to his resting heart rate and discuss which students have better circulo-respiratory efficiency.	
5. Have students discuss which activities can be performed mainly with anaerobic metabolism and therefore why circulo-respiratory efficiency is not as crucial for these activities.	

CONCEPTS	SUBCONCEPTS	GENERALIZATIONS	OBJECTIVES
3. Mechanical Efficiency - man moves to develop and maintain range and effectiveness of motion.	A. FORCE a. Application		
	NOTE: Many factors contribute to and affect the application of force, namely: Range of motion, leverage, mass, acceleration, followthrough, striking surface, body momentum. Because of the constraints of space, only the first two factors will be outlined here to serve as examples. Similar generalizations, objectives, and learning activities can be derived for the other factors with the help of the resources listed.		
	i. Range of motion	a. Increasing the range of movement of the body segment or the implement imparting force increases the distance through which speed can be developed, as well as the force imparted to the object.	The student will be able to: a. identify the ways of increasing the range of motion of a body segment or an implement when imparting force: - long backswing - rotating the trunk - transferring body weight b. apply this concept when performing various activities.
	ii. Leverage	a. The longer the third class lever of the body segment or the implement imparting force, the greater the speed at the distal end, and hence the more force imparted.	The student will be able to: a. identify the effect of leverage on imparting force to an object. b. apply this concept when performing various activities.

SUGGESTED ACTIVITIES	RESOURCES
1. Have students try different methods of increasing range of motion when imparting force to objects.	Mechanical Efficiency Resources – Page 73
2. Have students try throwing objects (discus, javelin, ball, etc.) with varying ranges of motion and determine which is the best method.	Video tape recorder
3. Video tape students throwing or hitting different objects and have them evaluate their own range of motion.	
4. Have students draw a generalization concerning the relationship of range of motion and force application.	
5. Have students apply this generalization to various activities.	
1. Have students try different methods of increasing leverage when throwing or striking objects.	Mechanical Efficiency Resources – Page 73
2. Have students try throwing and striking objects (badminton, field hockey, etc.) with different lengths of levers and determine the effect.	
3. Have students draw a generalization concerning the relationship of leverage and force application.	
4. Have students apply this generalization to various activities.	
5. Have students watch activities and analyze the use of leverage.	

CONCEPT	SUBCONCEPTS	GENERALIZATIONS	OBJECTIVES
3. Mechanical Efficiency	A. FORCE b. Reception	a. The more stable the base of support, the larger the surface area, and the longer distance over which force is absorbed, the more efficient will be the reception of force.	The student will be able to: a. identify the principles of effective force reception. b. apply these principles when performing various activities
	B. TIME	a. Decreasing the time necessary to impart force, or increasing the speed of the implement or body segment imparting force increases the force produced. (F=MA). b. The more force that is applied, the less time that is needed for an object to cover a certain distance. c. The more time that is available to impart force, the greater the possibility of more force being imparted. (Greater time for greater range of motion.) d. The sooner a player can anticipate his opponent's reactions the more time he has to react.	The student will be able to: a. identify the effect of time on mechanical efficiency b. apply the concept of time when performing various movements and activities

SUGGESTED ACTIVITIES	RESOURCES
1. Gymnastics - Have students try different methods of landing (absorbing force of the body): a. One foot, 2 feet, 2 feet and 1 hand, 2 feet and 2 hands - Which receives more force? Why? b. With locked knees, with slightly bent knees, with completely bent knees - Which receives more force? Why? 2. Wrestling - Have students try different methods of receiving takedown force from an opponent by varying the base of support (see subconcept C), the size of the surface area, and the distance over which force is received. 3. Lacrosse - Have students try receiving a ball: a. With the cross held rigid. b. With the cross moving a couple of inches. c. With the cross moving 1 - 2 feet. 4. Have students draw a generalization about force reception. 5. Have students apply this generalization to other activities.	Mechanical Efficiency Resources - Page 73
1. Have students strike an object with varying amounts of speed (different amounts of time). Which produces the most force? Why? 2. Have students strike an object with varying amounts of time to prepare for the swing (Eg. hurried swing, much time for the swing). Which produces the most force? Why? 3. Have students discuss how time influences strategy in a game situation.	Mechanical Efficiency Resources - Page 73

CONCEPT	SUBCONCEPTS	GENERALIZATIONS	OBJECTIVES
3. Mechanical Efficiency	C. STABILITY	a. The larger the base of support, the more nearly the line of gravity passes through the centre of the base and the lower the centre of gravity, the more stable will be the performer. b. The closer force is received to the performer's centre of gravity, the more stable will be the performer. c. The more stable the base on which to create force, the more force can be imparted.	The student will be able to: a. identify the principles affecting stability b. apply these principles when performing various activities
	D. ROTATION	a. The shorter the length of the radius of rotation the faster the speed of rotation.	The student will be able to a. state the concept of rotation b. apply this concept to various activities, especially gymnastics
	E. BUOYANCY	a. The greater the weight of the volume of water displaced by an object, the greater the force of buoyancy.	The student will be able to: a. state the concept of buoyancy in aquatics b. analyze different swimming strokes in terms of buoyancy c. apply the concept of buoyancy to advantage when performing various strokes

SUGGESTED ACTIVITIES	RESOURCES
1. Have physics teacher explain and demonstrate to the class, using audio visual aids, the different factors which affect stability.	Mechanical Efficiency Resources – Page 73
2. Have the students discuss how these factors can be applied to different sports activities.	Physics teacher
3. Have students try to knock each other over and thus determine the most stable position to be in to prevent being overturned.	
4. Have students try imparting force to objects from stable and unstable bases: Eg. Striking a ball while playing broomball, striking a ball with feet planted firmly on the ground.	

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1. Have students perform pullovers on the uneven parallel bars or high bar: a. With tucked legs. b. With slightly bent legs. c. With extended straight legs and pointed toes. Which is easier? Why?	Mechanical Efficiency Resources – Page 73
2. Have students perform giant swings on the high bar: a. With tucked body. b. With slightly bent body. c. With extended body. Which is easier? Why?	
3. Have students attempt somersaults in water in a tucked and extended position, and discuss why one is easier.	

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1. Have students take different-sized rubber balls and try pushing them deep into the water. Which are more difficult? Why?	Mechanical Efficiency Resources – Page 73
2. Have students float on their backs after inhaling deeply. Then: a. Exhale forcefully. b. Lift head and arms out of water. What happens in both cases? Why?	Swimming Resources – Page 83
3. Have students discuss why floating devices (kickboards, rubber tires, etc.) work?	
4. Have students perform different strokes trying to make themselves as buoyant as possible.	
5. Have students watch each other perform various strokes and analyze in terms of buoyancy.	

CONCEPT	SUBCONCEPTS	GENERALIZATIONS	OBJECTIVES
3. Mechanical Efficiency	F. RESISTANCE (in water)	a. The greater the cross sectional area of water displaced by the body the greater the resistance to movement through the water.	The student will be able to: a. state the concept of resistance in aquatics b. analyze different swimming strokes in terms of resistance c. apply the concept of resistance to advantage when performing various strokes
	G. PROPULSION (in water)	a. For every action there is an equal and opposite reaction. b. The more directly backward that force is applied, the more movement that will occur directly forward.	The student will be able to: a. state the concept of propulsion in aquatics b. analyze different swimming strokes in terms of propulsion c. apply the concept of propulsion to advantage when performing various strokes

SUGGESTED ACTIVITIES	RESOURCES
1. Have students pull each other through the water, first with legs and arms spread and then with legs and arms together. Which is easier? Why? 2. Have students push off from the side of the pool, on both front and back, and discover in what body shape they float furthest. 3. Have students perform various strokes trying different ways to overcome resistance and thus determining the best way to do each stroke in terms of resistance. 4. Have students watch each other perform various strokes and analyze in terms of resistance. 5. Have students observe films or film loops of various strokes and analyze in terms of resistance.	Mechanical Efficiency Resources – Page 73 Swimming Resources – Page 83
1. Have students sit on the edge of the pool and paddle (or pretend to paddle) straight back. Which way is their "canoe" going? Have students pull the "paddle" straight towards them. Which way is their "canoe" going? 2. Have students analyze various arm and leg movements in terms of propulsion and decide which movements create the most backward pull. Eg. whip kick vs frog kick, straight arm pull in crawl vs bent arm pull. 3. Have students perform different strokes trying to gain maximum propulsion with arms and legs. 4. Have students watch each other perform various strokes and analyze in terms of propulsion.	Mechanical Efficiency Resources – Page 73 Swimming Resources – Page 83

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
4. Neuromuscular Efficiency - man moves to develop and maintain motor functioning.	A. MUSCULAR STRENGTH	a. In a given muscle, the more working muscle fibres and the larger those fibres, the more muscular strength of that particular muscle. b. The more muscles remain inactive the more their fibres will atrophy (become useless), and the weaker the muscle will become.	The student will be able to: a. define muscular strength b. describe the physiology of development in a muscle c. recognize the importance of load in developing muscular strength d. outline the principles of resistance training including weight training and isometrics e. assess personal levels of strength f. design and participate in a personal program g. explain the sport of weight lifting

SUGGESTED ACTIVITIES

1. Discussions on the physiology of muscular strength development.
2. Have students examine muscle fibres (from meat) under a microscope.
3. Have students examine the muscle groups of the body and discuss what actions each performs.
4. Measure the strength of various muscles in the body using a dynanometer.
5. Have students participate in a number of strength development programs and discuss the advantages and disadvantages of each:
   - weight training
   - calisthenics
   - isometrics
6. Have students design their own personal strength development programs and record their progress for a month or longer. Retest strength levels every two weeks.
7. Have students discuss the role of weight training and the importance of strength in preparing for athletic competition.
8. Have a female athlete speak to the class on her weight training program.
9. Have students research and make a class presentation on the sport of weightlifting - weight classes, records, rules.
10. Have a weightlifter or bodybuilder speak to the class on his program and way of life.
11. Have students write a biography of a famous weightlifter. (Eg. Alex Alexiev).

RESOURCES

Neuromuscular Efficiency Resources - Page 75

Transparencies or slides of muscle fibres

Wall charts or diagrams of the muscles of the body

Dynanometer

Guest lecturers - weightlifter
female athlete

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
4. Neuromuscular Efficiency	B. MUSCULAR ENDURANCE	a. The more endurance a muscle has, the longer it can continue to contract under a certain workload. b. The more endurance a muscle has, the more blood vessels in the muscles and the more tolerance of lactic acid. c. The more a muscle is overloaded with increased frequency of contractions, the more muscular endurance that will be developed.	The student will be able to: a. define muscular endurance b. describe the physiology of endurance development in a muscle c. outline how the overload principle applies to developing muscular endurance d. assess personal levels of muscular endurance
	C. FLEXIBILITY	a. The greater the flexibility of a joint or a group of joints (Eg. wrist), the greater the range of movement of that joint or group of joints. b. The more the muscle fibres and tendons are stretched around a joint the greater the flexibility of that joint.	The student will be able to: a. define flexibility b. describe how flexibility is developed in a joint c. assess current levels of flexibility in various joints d. outline exercises to improve flexibility in various joints e. appraise the importance of flexibility in all physical activities

SUGGESTED ACTIVITIES	RESOURCES
1. Discussion on the concept and development of muscular endurance. 2. Measure endurance of various muscle groups (Eg.upper body - flexed arm hang, abdominals - 60 second speed situps). 3. Have students discuss which activities would contribute most to muscular endurance. 4. Have students design individual activity programs which would improve muscular endurance.	Neuromuscular Efficiency Resources - Page 75
1. Discussion on the concept and development of flexibility. 2. Measure flexibility of various joints. 3. Have students perform exercises for improving flexibibity in different joints and develop individual programs to work on joints with poor flexibility. 4. Have students with varying degrees of flexibility try various stunts and discuss the role of flexibility in performing athletic activities. 5. Have a physiotherapist speak to the class on the importance of flexibility in the prevention of athletic injury.	Neuromuscular Efficiency Resources - Page 75 Guest lecturer - Physiotherapist.

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
4. Neuromuscular Efficiency	D. BALANCE	a. The more balance a performer can maintain in performing physical skills, the better will be his performance.	The student will be able to: a. define dynamic and static balance b. identify various methods of measuring dynamic and static balance c. describe the role of both static and dynamic in sport activities and every day movements
	E. SPEED F. POWER G. COORDINATION H. REACTION TIME I. AGILITY	Because of the constraints of space, these subconcepts will not be individually outlined here. However, their generalizations, objectives, suggested activities, and resources would be similar to those subconcepts discussed above.	

SUGGESTED ACTIVITIES	RESOURCES
1. Discussions on the concepts of dynamic and static balance and their role in sport activities and every day movements.	Neuromuscular Efficiency Resources – Page 75
2. Measure dynamic and static balance.	

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
5. Joy of Movement - man moves to derive pleasure from movement experiences.		a. The more joy a participant derives from movement, the more he will participate.	The student will be able to: a. derive joy or pleasure from a variety of physical activities b. describe why they derive pleasure from certain activities and not others
6. Self Knowledge - man moves to gain self-understanding and appreciation		a. The more self knowledge a participant has about his ability and potential, the more satisfied he will be with his participation in physical activities.	The student will be able to: a. identify his/her level of physical fitness and skill in various sports b. appraise realistically his/her potential for physical fitness and skill in various sports

SUGGESTED ACTIVITIES	RESOURCES
1. Have the students discuss what pleasures they derive from different activities and why. 2. Have students discuss ideas that would make activities more enjoyable. 3. Have a national or international athlete speak to the students about the pleasures they derive from competing.	Guest Speaker - National or international athlete.
1. Have students measure their current levels of physical fitness and skill in various sports. 2. Have students discuss what they feel their potential is, in light of their present schedules of training and practice.	Physical fitness tests - see Concept 2 Circulo-respiratory efficiency and Concept 4, neuro - muscular efficiency. Sports Skills tests

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
7. Catharsis - man moves to release tension and frustration		a. The more catharsis derived from physical activity, the happier and more satisfied will be the individual.	The student will be able to: a. experience a feeling of catharsis from participating in certain physical activities
8. Challenge - man moves to test his prowess and courage.		a. The more an individual can meet the challenge set by himself for a particular physical activity, the happier and more satisfied he will be.	The student will be able to: a. identify a challenge for his/herself in a particular physical activity b. attempt to meet that challenge

SUGGESTED ACTIVITIES RESOURCES

1. Have students participate in a variety of physical activities that could be cathartic - Eg. wrestling, boxing, floor hockey, long distance running, racquetball.
2. Have students discuss whether they achieved a feeling of catharsis and if this was beneficial to their personal wellbeing.

1. Have students set a goal for themsleves in a particular physical activity - Eg. run a mile under six minutes; sink eight out of ten foul shots; perform a handspring vault.
2. Have students work towards that goal and discuss whether or not they feel they have met the challenge.

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
9. Awareness - man moves to clarify his conception of his body and his position in space.		a. The more aware a performer is of what body parts are being used in a particular skill and where those parts are in space, the more skilled will be his performance.	The student will be able to: a. identify what body parts are being used and where those parts are in space for all skills attempted
10. Relocation - man moves in a variety of ways to propel or project himself.		a. The more ways a performer can relocate himself in space, the better will be his performance.	The student will be able to: a. identify different locomotor patterns or ways of relocating himself b. distinguish and use the best way of relocating himself in a variety of sports settings
11. Relationships - man moves to regulate his body position in relation to the ojbects or persons in his environment.	A. SPACE a. Opponents	a. The more aware a games players is of his opponents' positions in space, the better able he is to maneuver around them. b. The more space that can be created between and away from opponents, the more the offensive possibilities that are created. c. The more space that can be covered or closed between opponents, the fewer offensive possibilities that are allowed for the opponents.	The student will be able to: a. in an offensive game situation, identify and apply ways of creating space and taking advantage of space b. in a defensive game situation, identify and apply ways of covering or closing space

SUGGESTED ACTIVITIES

RESOURCES

1. Have students reflect on what body parts were used and where those parts were in space for all skills attempted.
2. Video-tape students' movements and have them observe themselves to analyze where their bodies were in space.

Video-tape recorder

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1. Have students attempt a variety of locomotor patterns and determine situations where they would be most useful.

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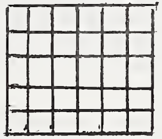
1. Have students practice offensive and defensive space utilization in goal games involving small teams, with the use of a grid (example below).



   a. Play 1 on 1 in 1 square
   b. Play 2 on 2 in 2 squares
   c. Play 3 on 3 in 4 squares
   d. Play 4 on 4 in 6 squares, tec.

   Pylons can be placed at the corners of the squares.
2. Have students watch different goal games and analyze the use of space both on offence and defence.
3. In court games have students suggest and try ways of covering space while on defence, and hitting to opponent's space while on defence.

Sport texts on strategy

Seidel et al.[7] Sport Skills: A Conceptual Approach to Meaningful Movement.

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[7] Seidel, Beverley L., Fay Biles, Grace Figley, Bonnie Neuman, Sports Skills: A Conceptual Approach to Meaningful Movement. Dubuque, Iowa: Wm. C. Brown Co., 1975.

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
	b. boundaries	a. The more aware a games' player is of his position on the playing area in relationship to boundaries and other markings, the more effective he will be.	The student will be able to: a. identify and apply ways of taking advantage of boundaries and markings on the playing area
		b. The closer the players or objects to the boundaries of the playing area, the more restricted are the options for play in a goal game.	
	B. OBJECTS	a. In goal and court games, the better a player can control his relationship with or distance from an object, the better he can manipulate that object.	The student will be able to: a. identify the importance of body-object relationship in manipulating objects and demonstrate ability to do so
		b. In aiming games where the relative positions of objects score, the more a player understands and takes advantage of the relationships of the objects, the more likely he will be to score.	b. identify advantageous positions of objects in aiming games where the relative positions of objects score. Eg. guards, double takeouts
12. Maneuvering Weight - man moves to support, resist, and transport mass.		a. The better able a performer is to maneuver weight, the more effective performer he will be.	The student will be able to: a. identify the factors which influence the maneuvering of weight b. maneuver weight (his own, another performer's, or an object's) effectively

SUGGESTED ACTIVITIES	RESOURCES
1. Have students practice offensive and defensive tactics of goal games in a confined space. (Between grid lines of a football field.) 2. Have students suggest and try ways of using boundaries in court games.	Sport texts on strategy Seidel et al[7] Sport Skills: A Conceptual Approach to Meaningful Movement.
1. Have students try manipulating objects (throwing, catching, striking, fielding) at different distances from the object and ascertain the best distance for each skill. 2. Have students watch other players manipulating objects and analyze the body-object relationship. 3. Have students discuss strategies of aiming games 4. Have an experienced bowler or curler speak to the class (chalk talk) on the strategies of his game.	Sport texts on aiming games - Bowls, Curling, Shuffleboard, etc. Seidel et al.[7] Sport Skills: A Conceptual Approach to Meaningful Movement.
1. Have students try different methods of maneuvering their own body weight in different situations. Eg. mountain climbing, balance beam, rope climbing. 2. Have students try different methods of maneuvering another performer's weight and discuss the mechanical principles involved. Eg. wrestling, lifts in figure skating. 3. Have a weightlifter speak to the class on different methods of lifting heavy weights (maneuvering object's weight) and discuss the mechanical principles involved.	Mechanical Efficiency Resources - Page 73 Guest lecturer - weight lifter

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[7] Seidel, Beverly L., Fay Biles, Grace Figley, Bonnie Neuman. Sports Skills: A Conceptual Approach to Meaningful Movement. Dubuque, Iowa: Wm. C. Brown Co., 1975

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
13. Object Projection - man moves to impart momentum and direction to a variety of objects.	A. APPLICATION OF FORCE	See Concept 3: Mechanical Efficiency A (a) Force Application.	
	B. DIRECTION OF FORCE	a. The direction in which an object moves is determined by the point at which force is applied in relation to the object's centre of gravity. b. Applying force directly through the centre of gravity of an object results in a straight trajectory; an off-centre trajectory due to spin. c. In throwing and striking activities the direction in which an object moves is a line that is tangent to the point of release in the throwing or striking arc. d. The flatter the striking or throwing arc, the more accuracy is increased. e. In aiming type games, the more consistent the application of force over successive tries and the more nearly in a straight line all forces are applied, the more accurate will be the direction of force. f. The closer the angle of projection is to 45 degrees, the greater will be the distance projected.	The student will be able to: a. outline what factors affect the direction in which an object moves. - point of application of force. - point of release in arc. - effect of spin - topspin backspin right backspin left - effect of gravity, air resistance, water resistance and friction b. apply these factors in a variety of sports activities, especially aiming type games

SUGGESTED ACTIVITIES	RESOURCES
1. Have students kick a rubber ball: (a) in the centre of the ball, (b) to the left of centre, (c) to the right of centre. What path does each take? Why?	Mechanical Efficiency Resources - Page 73
2. Have students experiment with different types of spin and discover the effect of spin on direction.	
3. Have students pitch a ball underhand releasing it: (a) before reaching the knee, (b) at knee level, (c) after passing the knee. What trajectory does the ball take? Why?	
4. Have students throw a softball for distance releasing it: (a) below 45° angle, (b) at 45° angle, (c) above 45° angle. Which goes further? Why?	
5. Aiming type games: (a) Have students try different methods of bowling a ball and discover the best ways of gaining consistency of direction. (Pendulum swing, all action in a straight line with target.) (b) Have students discuss what compensations an archer must make in form to gain the same accuracy of aiming that a shooter has with a gun. (Absolute consistency of form on each shot.)	
6. Have students draw generalizations about direction of force.	
7. Have students apply these generalizations to throwing and striking activities.	
8. Have students analyze directions that projected objects take in terms of the factors affecting direction of force.	

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
14. Object Reception - man moves to interrupt a variety of objects by reducing or arresting their momentum.	A. RECEPTION OF FORCE	See concept 3 Mechanical Efficiency A (b) Force Reception.	
15. Communication - man moves to share ideas and feelings with others.	A. FRIENDLINESS INTERACTION	a. The more friendliness and interaction that occurs at a sports festival, the more longlasting will be the impact of the sports festival on society.	The student will be able to: a. identify the opportunities for interaction between athletes, officials, and spectators at a sports festival
	B. PEACE - GOODWILL	a. The more peace and good will that is spread at a sports festival, the more longlasting will be the impact of the sports festival on society.	The student will be able to: a. describe the contribution of international sports festivals to international peace, goodwill, and understanding
	C. SPORTSMANSHIP- contemporary issues of sport.	a. The more all competitors display "sportsmanship", the more successful will be the sports festival	The student wil be able to: a. define "sportsmanship" for himself
		b. The more completely contemporary issues of sport are resolved, the more successful will be any sports festival.	b. identify and discuss issues related to sports participation: 1. Winning at all costs. - use of drugs - illegal practices - detrimental training practices 2. The professional foul 3. Calling own fouls 4. Women in sports

SUGGESTED ACTIVITIES	RESOURCES
Have students prepare a skit of interaction in the games village between athletes from different countries.	
1. Question for discussion: a. Is winning at all costs justified? b. Should a player ever foul on purpose to prevent a score - the professional foul? c. Should players be taught techniques to disguise actions from the officials? d. Are any and all training practices justified? e. Are "amateur" athletes still amateurs? How professionalized should they become? Where can a line be drawn between amateurism and professionalism? f. Should "sex test" be allowed at international competitions? g. What will be the role of women in sport in the future?	Communication Resources — Page 76 Teacher's Manual XI Commonwealth Games Page 67 - 70

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
16. Teamwork - Cooperation - man moves to cooperate in pursuit of common goals.	A. PARTICIPANTS	a. The better teammates can coordinate their efforts with each other, the better will be their total performance.	The student will be able to: a. identify instances of co-operation or teamwork between members of the same team, even in so-called "individual" sports b. identify instances of co-operation or teamwork between members of the opposite team c. discover the possibility of cooperation in games
	B. COMMUNITY	a. The more cooperation by the community hosting the sports festival, the more successful will be the sports festival.	The student will be able to: a. distinguish the role played by the community, especially volunteers, in planning and preparing for any sports festival
	C. GOVERNMENTS	a. The more cooperation between different levels of government, the more successful will be the sports festival.	The student will be able to: a. outline the parts played by the three levels of government (municipal, provincial, and federal) in planning for and financing the sports festival
17. Competition - man moves to vie for individual or group goals.	A. EXCELLENCE	a. The more performers strive for and are prepared for excellence, the better will be their performances.	The student will be able to: a. identify the necessary prerequisites for achieving excellence in sports competition: physiological psychological biomechanical

SUGGESTED ACTIVITIES	RESOURCES
1. Have students list instances of cooperation or teamwork between team members of "individual" sports: Eg. athletics relay teams swimming relay teams cycling relay teams badminton doubles bowls pairs 2. Have students list instances of cooperation or teamwork between members of opposite teams. Eg. Waiting for opponent to be ready before serving. Adjusting high bar for opponents. 3. Have students play "cooperative" games. 4. Have students invent "cooperative" games they can play themselves.	Cooperation Resources — Page 77
1. Have students research the use of volunteers on the various committees of the Commonwealth Games Foundation. 2. Have students research the role of the community in planning for sites of facilities, cultural events, etc.	Newspapers Radio & Television Commentaries.
	Newspapers
1. Have students read autobiographies of international athletes to determine their preparation for intensive competition. 2. Have students read coaching texts and report on methods of preparing athletes for high level competition. 3. Have students discuss what their own level of excellence is for sports participation and try to decide what they hope to achieve from sports participation - excellence or recreation.	Competition Resources - Page 77

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
18. Leadership - man moves to motivate and influence group members to achieve common goals.	A. COACHING	a. The more leadership shown by coaches, the better will be their athletes' performances.	The student will be able to: a. appraise the role and importance of coaching, in preparing athletes for competition
	B. OFFICIATING	a. The more leadership shown by officials, the more enjoyable and beneficial will be the athletic competition.	The student will be able to: a. appraise the role and importance of officiating in athletic competition
	C. ORGANIZATION	a. The more leadership shown in the organization of sports festival, the more successful will be the sports festival.	The student will be able to: a. outline and carry out the steps necessary in organizing an athletic meet or competition b. outline and carry out the organization of a sports festival c. outline the procedures necessary for selecting and training national representative teams d. outline the organization of Canadian and provincial sports governing bodies responsible for administering sport

SUGGESTED ACTIVITIES	RESOURCES
1. Have students research the life of a prominent coach and assess his/her contribution to their athlete's performance. 2. Have students assist with coaching an elementary school or community club sport and report on their experiences. 3. Have students discuss reasons why people might want to coach. (Eg. ego, sincere concern for individual)	Leadership Resources - Page 78 Coaches' Autobiographies
1. Have students discuss the role of the official in athletic competitions. 2. Have students officiate intramural sports or elementary school sports and report on their experiences.	Leadership Resources - Page 78
1. Have students organize a competition (gymnastics, athletics, swimming meet, wrestling, etc.) in their school. 2. Have students organize a sports festival - see Concept 1 Sports Festival. 3. Have students research national organizations responsible for selecting and training national representative teams. Eg. Canadian Olympic Association, Commonwealth Games Association?? (Who is responsible?) 4. Have the president of a provincial sports governing body talk to the students about their organization and program.	Leadership Resources - Page 78 Organization and Administration texts. President of a sports governing body.

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
19. Participation - man moves to develop his capabilities for taking part in movement activities of his society.		a. The broader the range of an individual's participation in the sports of a sports festival, or in activities similar to those sports, the greater that person's appreciation for, and understanding of the particular sports festival.	The student will be able to: a. participate in as many sports of the particular sports festival as possible and/or similar sports from the same classifications. (see Appendix B) b. demonstrate the skills necessary to participate in the sports c. demonstrate a knowledge of the rules of the sports while actually playing the sports d. apply the tactics and strategy of the sports while actually playing the sports e. demonstrate a knowledge of the etiquette of the sports while actually playing the sports

SUGGESTED ACTIVITIES	RESOURCES
1. Have the students participate in as many of the sports of the particular sports festival as possible. If facilities and/or equipment are not available for certain sports, have students participate in similar sports from the same classification (see Appendix B). The same concepts will apply to all sports in the same classification. For example, instead of bowls, use curling; instead of shooting, use archery.	Participation Resources - Page 79 Physical Education Resource Book Index - Appendix C.

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
20. Movement Appreciation - Spectatorship - man moves to become knowledgable and appreciative of sports and expressive movement forms.	A. KNOWLEDGE OF RULES & OFFICIATING	a. The more knowledgable the spectator concerning the rules of the sport watched, the more appreciation and enjoyment will be derived.	The student will be able to: a. outline the rules of the various sports on a written rules test (KNOWLEDGE) b. identify the rules being applied and the officials' calls being made during an actual game or competition (ANALYSIS) c. appraise the quality of officiating during a specific sports event (EVALUATION)
	B. KNOWLEDGE OF SKILLS	a. The more knowledgable the spectator concerning the skills involved in the sport watched, the more appreciation and enjoyment will be derived.	The student will be able to: a. describe the skills necessary for the various sports on a written test b. identify the various skills being used during an actual game or competition c. appraise the level of skill of different players in a competition d. describe the mechanical principles and physiological principles involved in the skills e. analyze a performance in terms of the mechanical principles and physiological principles involved

SUGGESTED ACTIVITIES	RESOURCES
1. Discussion and demonstration of rules. 2. Have students spectate an actual competition and record the number of times specific rules are applied and specific officials' calls are made. 3. Have students spectate an actual competition and evaluate the officials' performance - strong points weak points calls missed	Participation Resources - Page 79 Physical Education Resource Book Index - Appendix C Rule Books of Specific Sports
1. Discussion and demonstration of skills. 2. Have students spectate an actual competition (either live or on film) and (a) record the number of times specific skills are used, and (b) rate the competitors on each of the skills. 3. Have an expert player come to class to demonstrate and explain the skills. 4. Discussion and explanation of the mechanical principles and physiological principles involved in the skills. 5. Have the students analyze a performance (either live or on film) in terms of mechanical principles and physiological principles.	Participation Resources - Page 79 Suggested activities for concepts: 2 - Circulo-respiratory efficiency, 3 - Mechanical efficiency, 4 - Neuromuscular efficiency. Physical Education Resource Book Index - Appendix C

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
20. Movement Appreciation - Spectatorship	C. KNOWLEDGE OF TACTICS AND STRATEGY	a. The more knowledgable the spectator concerning the tactics and strategy of the sport watched, the more appreciation and enjoyment will be derived.	The student will be able to: a. describe the tactics and strategy necessary for successful participation in various sports b. identify tactics used and tactics applied during an actual game or competition
	D. KNOWLEDGE OF PERFORMERS AND PERFORMANCES	a. The more knowledgable the spectator concerning the performers competing in a particular sport the more appreciation and enjoyment will be derived. b. The more knowledgable the spectator concerning past performances (records, standings) in a particular sport, the more appreciation and enjoyment will be derived.	The student will be able to: a. outline the Canadian performers participating in the various sports b. identify the outstanding athletes from other countries who are expected to perform well c. predict the probable placings of Canadian athletes in comparison to athletes of other countries d. outline the records for the various sports e. compare C. G. records with other sport festival records
	E. KNOWLEDGE OF COMPETITION ORGANIZATION	a. The more knowledgable the spectator concerning the organization of the competitions of the various sports, the more appreciation and enjoyment will be derived.	The student will be able to: a. describe the type of competition (tournament - single or double elimination, round robin heats and finals, etc.) and elimination procedures for each of the events b. outline the steps a competitor must go through to win a medal

SUGGESTED ACTIVITIES	RESOURCES
1. Discussion and demonstration of tactics and strategy used in different situations.	Participation Resources - Page 79
2. Have students spectate an actual competition (either live or on film) and record the different tactics and strategies employed.	
1. Have students compile lists of Canadian performers in each sport, record their best performances, and compare these with the records and current performances of other international athletes.	Movement Appreciation Resources - Page 86
2. Have students research and write a biography of a Canadian or international competitor.	Newspapers - sports magazines
3. After the events, have students compare the actual performances with the records - outline what records were broken.	Olympic records
4. Have students compare their own school track meet records with the C. G. records.	Canada Games records Commonwealth Games records.
5. Have students compare C. G. records with Olympic records and Canada Games records.	Physical Education Resource Book Index - Appendix C
6. Have students trace how records of international competitions have improved over the last 20 years, and speculate on why this might be so.	
1. Have students prepare charts to illustrate how each sport will be organized and trace their favourite athlete through to a gold medal.	Physical Education Resource Book Index - Appendix C.
2. Have students organize a competition (gymnastics, track, swimming meet, boxing tournament, etc.) similar in format to the sports festival competition.	Texts on athletic competition organization and scheduling.

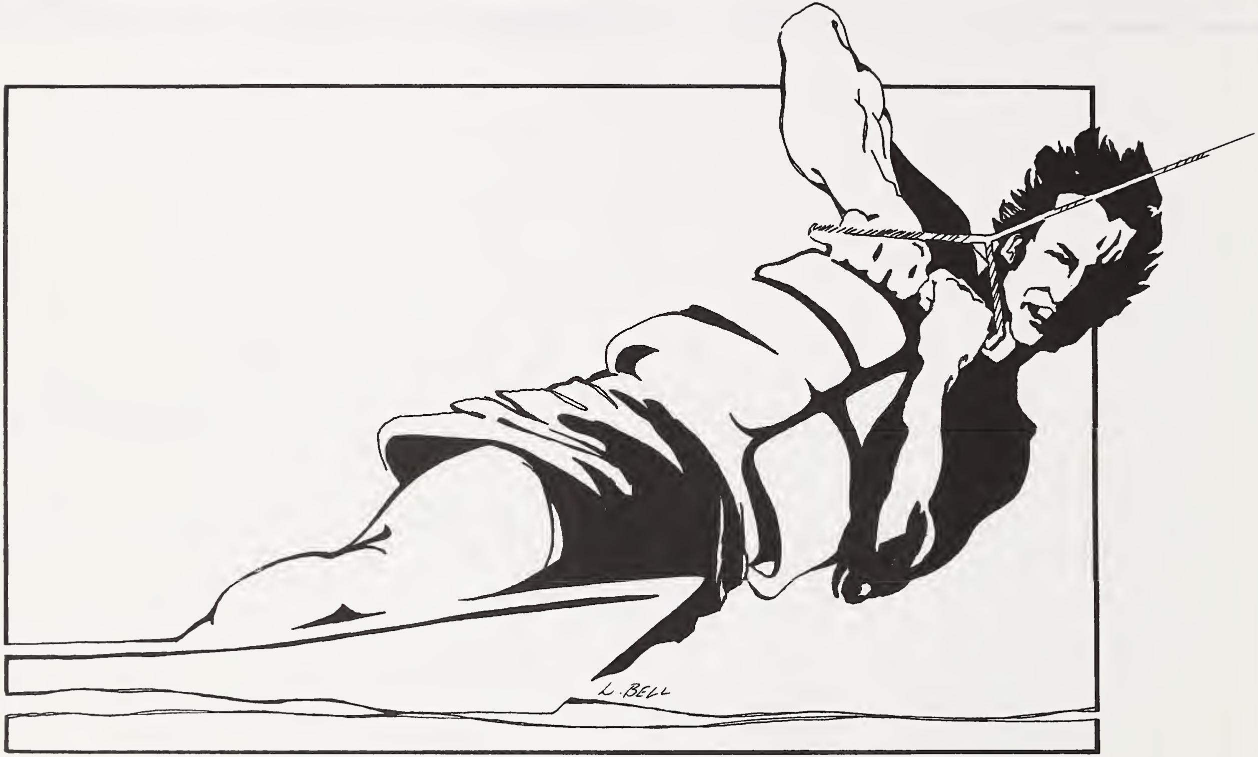
CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
	F. KNOWLEDGE OF ETIQUETTE AND RITUALS	a. The more knowedgable the spectator concerning the etiquette and rituals of the sport watched the more appreciation and enjoyment will be derived.	The student will be able to: a. outline the unwritten rules of etiquette and rituals peculiar to each sport b. distinguish between actions governed by rules and actions governed by etiquette
	G. KNOWLEDGE OF HISTORY DEVELOPMENT	a. The more knowledgable the spectator concerning the history and development of a particular sport, the more appreciation and enjoyment derived from watching the present form of the sport.	The student will be able to: a. describe the origins of the various sports and outline their development to the present day
21. Cultural Understanding - man moves to understand, respect, and strengthen the cultural heritage.	A. FOLK DANCES	a. The more cultural understanding of competing countries through the medium of folk dance, the more appreciation will be instilled for the actual sports festival and the competing countries.	The student will be able to: a. distinguish folk dances from different competing countries and explain how the dances reflect their culture b. perform folk dances from different competing countries

SUGGESTED ACTIVITIES	RESOURCES
1. Have students research the rules of etiquette found in a particular sport and discuss the reason for their development. 2. Have students spectate a sporting event and record the incidents of displays of etiquette. 3. Questions for discussion: a. Should some of the unwritten rules of etiquette become enforced written rules? b. Are all the present rules of etiquette necessary? What ones could be deleted? What ones should be added? c. Do the little rituals of competitors prior to and/or during competition increase the interest and appeal for spectators?	Participation Resources - Page 79
1. Have students research a sport from its early beginnings to the present day. 2. Have students collect equipment and uniforms from previous years - a sports museum. 3. Have students participate in the sports using former rules or old equipment. 4. Questions for discussion: a. How has the development of equipment affected performances in various sports? b. Why were rule changes made? How have the changes affected the way the sport is played?	Participation Resource - Page 79 Movement Appreciation Resources - Page 86 Physical Education Resource Book Index - Appendix C
1. Have students research the dance and music forms from different areas of the world: Eg. Africa, Caribbean, America, Asia, Europe, Oceania 2. Have students perform folk dances from these different areas. 3. Have students compare and contrast the folk dances from different global areas and discuss how the dances reflect the area's culture.	Folk Dance Resources - Page 88 Social Studies Curriculum Social Studies Text Books Art, Music and Drama of Commonwealth Countries

CONCEPT	SUBCONCEPT	GENERALIZATIONS	OBJECTIVES
	B. NATIONAL GAMES	a. The more cultural understanding of competing countries through the medium of national games, the more appreciation will be instilled for the actual sports festival and the competing countries.	The student will be able to: a. distinguish national games from different competing countries and explain how the games reflect their culture
22. Facilities	A. COMMONWEALTH GAMES	a. The more knowledge concerning the facilities of the Commonwealth Games, the more the facilities will be used after the Games are over.	The student will be able to: a. describe the facilities being developed for the Commonwealth Games b. describe the activity programs and opportunities that will be available to Alberta residents after the games have been completed
	B. LOCAL COMMUNITY	a. The more knowledgable a student about the facilities and programs in his local community, the more use he will make of them.	The student will be able to: a. identify facilities and programs available in his/her own community for participating in Commonwealth Games sports and/or other activities b. plan the physical activities he/she would like to participate in after leaving school

SUGGESTED ACTIVITIES	RESOURCES
1. Have students participate in games from different countries and areas of the world. 2. Have students modify present games or invent new games which reflect the culture of various countries.	National Games Resources — Page 89
1. Have students map the various facilities in Edmonton and surrounding area. 2. Have students visit the facilities and learn what programs will be available after the Commonwealth Games are over.	
1. Have students visit the local recreational facilities available in their communities. 2. Have the recreation director or other community leader speak to the students on activity possibilities in their own community. 3. Have students outline what activities they would like to participate in for each decade after leaving school.	Physical Education Resource Book Index — Appendix C Local Newspapers Recreation Department Bulletins Guest Lecturer - Recreation Director

Resources


L. BELL

RESOURCES

Introductory Note:

Section A outlines the sources of films referred to in Section C: Resources for Specific Concepts. After each film in Section C, there is a number which refers to the source of that film (For example, (2) indicates the film can be obtained from the National Film Board).

A. SOURCES OF FILMS

1. Canadian Red Cross Society 1504 - 1 Street, S. E. Calgary, Alberta; 9931 - 106 Street
   Edmonton, Alberta

2. National Film Board 344 - 12th Avenue, S. W. Calgary, Alberta; 10031 - 103 Avenue
   Edmonton, Alberta

3. Recreation Branch Department of Culture, Youth and Recreation 14th Floor, C.N. Tower
   Edmonton, Alberta

4. University of Alberta Educational Media Division Department of Extension Edmonton, Alberta

5. University of Calgary Department of Communication Media (Audio Visual Services) Room SS 104
   Calgary, Alberta

B. XI COMMONWEALTH GAMES RESOURCES - other resources designed especially for the 1978 Commonwealth Games.

1. Art, Music, and Drama of Commonwealth Countries - (a source book for secondary teachers)
2. XI Commonwealth Games Students' Workbook - (elementary grades)
3. XI Commonwealth Games Teachers' Manual - (elementary grades)
4. Literary Glimpses of the Commonwealth - compiled by the Education Committee of the XI Commonwealth Games.
5. Henderson, Arnold. The History of the Commonwealth Games.
6. Physical Education Resource Book
7. Social Studies Curriculum - Junior High School
8. Social Studies Curriculum - Senior High School

C. RESOURCES FOR SPECIFIC CONCEPTS

CONCEPT 1. Sports Festival

a. General

Cox, H. *The Feast of Fools*. New York: Perennial Library, 1972
(discussion of the concept of festivals)

Mandell, Richard. *The Nazi Olympics*. New York: Macmillan, 1971
(Chapter 5, "Festival and Symbols" discusses the sports festival)

Smith, Garry J. "Ritual, Ceremony, and Sport", Katimavik 3(1):1, 1976.
(University of Alberta, Faculty of Physical Education and Recreation Publication)

b. Commonwealth Games

British Empire and Commonwealth Games Association of Canada. *Canada at the IX British Commonwealth Games*. Montreal, 1976

British Empire and Commonwealth Games Canada (1954) Society. *The Official History of the Vth British Empire and Commonwealth Games*, Vancouver, 1954

Henderson, Arnold. *The History of the Commonwealth Games*. 1977 (in press)
(Includes a complete history and bibliography for every Commonwealth Games up until 1978)

Film (4) "The Spirit of '78" (XIth Commonwealth Games - Edmonton, Alberta) - also available from Commonwealth Games Office, Edmonton, Alberta

c. Olympics

Cosentino, Frank, and Glynn Leyshon. Olympic Gold: Canadian Winners of the Summer Games. Toronto: Holt, Rinehart and Winston of Canada, Ltd., 1975.
(Canada's medal winners 1904 - 1972)

Jessup, Harvey M. The Little Known Olympic Sports. Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1972.

Kieran, John and Arthur Daley. The Story of the Olympic Games. Philadelphia: J. P. Lippincott Co., 1973.
(A detailed history of each Olympic Games up to 1972)

Killanin, Lord, and John Rodda. The Olympic Games. Don Mills, Ontario: Collier Macmillan Canada Ltd. 1976.
(Includes a history of the International Olympic Committee, organization of the Olympic Games, the twenty Olympiads from 1896 - 1972, and complete records of medal winners in all events.)

Film: (3) -"Tokyo Olympiad"

d. Pan - American Games

Pan-American Games 1976 Society. Vth Pan-American Games. Winnipeg: MacFarlane Communication Services, 1969.

Film: (2) and (4) - "Springboard to the Sun" (IVth Pan-American Games - Sao Paulo, Brazil) 27 minutes B.W.

e. Canada Games

Film: (2) - "First Canadian Winter Games - Quebec 1967"

Film: (2) - "The Second Arctic Winter Games: (Whitehorse, Yukon) 28 minutes color

RESOURCES

CONCEPT 2. Circulo - Respiratory Efficiency

Clarke, David H. *Exercise Physiology*. Englewood Cliffs, N. J.: Prentice - Hall, Inc., 1975.

Cooper, Kenneth H. *Aerobics*. New York: Bantam Books, 1968.

Cooper, Kenneth H. *The New Aerobics*. New York: Bantam Books, 1970.

Cooper, Mildred and Kenneth H. Cooper. *Aerobics for Women*. New York: Bantam Books, 1972.

Health and Welfare Canada. *Get Fit - Keep Fit*. A Physical Fitness and Training Guide for Young Canadians.

CONCEPT 3. Mechanical Efficiency

Broer, Marion R. *Efficiency of Human Movement*. (3rd ed.). Philadelphia: W. B. Saunders Co., 1973.
(Basic mechanical principles underlying efficient movement; application of mechanical principles to fundamental physical skills, sports, and dance.)

Canadian Red Cross Society. *National Instructor Guide and Reference*. (5th ed.) Toronto: Canadian Red Cross Society, 95 Wellesley Street East, 1977.
(Outlines three main aquatic concepts - buoyancy, propulsion, and resistance.)

RESOURCES

Dyson, Geoffrey H. G. *The Mechanics of Athletics*. (6th ed.) London: University of London Press, Ltd., 1973.

Hay, James G. *The Biomechanics of Sports Techniques*. Englewood Cliffs, N. J.: Prentice - Hall Inc., 1973.
(Outlines biomechanical concepts of movement and analyzes several sports in the light of these concepts.)

Seidel, B. L., F. R. Biles, G. E. Figley, and B. J. Neuman. *Sports Skills: A Conceptual Approach to Meaningful Movement*. Dubeque, Iowa: Wm. C. Brown Co., 1975.
(Outlines mechanical principles of movement and common concepts of movement and strategy, and applies these concepts to a variety of sports.)

Wells, Katharine F., and Kathryn Luttgens. *Kinesiology: Scientific Basis of Human Motion*. Philadelphia: W. B. Saunders Co., 1976.
(Anatomic fundamentals of human motion; fundamentals of biomechanics; motor skills - principles and applications.)

RESOURCES

CONCEPT 4. Neuro - Muscular Efficiency

C.A.H.P.E.R. C.A.H.P.E.R. Fitness Test. Ottawa: Canadian Association for Health, Physical Education, and Recreation.

Corbin, Charles B. et al. Concepts in Physical Education With Laboratories and Experiments. (2nd ed.) Dubuque, Iowa: Wm. C. Brown, 1974.
(Outlines the several components of physical fitness and gives laboratories for understanding and measuring each component.)

Crouch, James E. Functional Human Anatomy. (2nd ed.) Philadelphia: Lea and Febiger, 1972.

Hooks, Gene. Weight Training in Athletics and Physical Education. Englewood Cliffs, N. J.: Prentice - Hall, Inc. 1974.
(Covers the physiology of strength development, principles of developing programs, and includes programs for specific sports.)

Klafs, Carl E., and Daniel D. Arnheim. Modern Principles of Athletic Training. (3rd ed.) St. Louis: C.V. Mosby Co., 1973.

RESOURCES

CONCEPT 15. Communication

Subconcept C. Sportsmanship - Contemporary Issues of Sport

a. General

Ball, W. Donald and John W. Loy. *Sport and Social Order*. Reading, Mass.: Addison - Wesley Publication Co., 1975.
(Discusses issues of modern sport from a sociological point of view.)

Gruneau, Richard S., and John G. Albinson. *Canadian Sport: Sociological Perspectives*. Don Mills, Ontario: Addison - Wesley (Canada) Ltd. 1976.

Michener, James A. *Sports in America*. New York: Random House, 1976.
(Discusses many of the issues of modern sport - health, children and sports, women in sport, upward escalation, colleges and universities, the media, financing, government control, competition and violence.)

Yiannakis, Andrew, Thomas McIntyre, Merrill Melnick and Dale Hart. *Sport Sociology: Contemporary Themes*. Dubuque, Iowa: Kendall/Hunt Publishing Co., 1976.

Film: (2) - "Of Sport and Men" (a film essay on modern man and his passion for sport) 58 min. B.W.

b. Women in Sport

Gerber, Ellen W., Jan Felshin, Pearl Berlin, and Waneen Wyrick. *The American Woman in Sport*. Reading Mass.: Addison - Wesley Publishing Co., 1974.
(Covers historical, sociological, psychological, and biophysical topics of women in sport.)

Harris, Dorothy V. (ed.) *Women and Sport: A National Research Conference*. The Pennsylvania State University: College of Health, Physical Education and Recreation, 1972.

Film: (2) - "Your Move" (A film about girls' and women's participation in sport at all levels - recreational to international competition.)

RESOURCES

CONCEPT 16. Teamwork - Cooperation

Orlick, Terry, and Cal Botterill. Every Kid Can Win. Chicago: Nelson House, 1975.
(Good bibliography for non-competitive sports.)

Orlick, Terry. Competitive Insanity: Cooperative Alternatives. Washington D. C.: Hawkins and Associates, 729 Deleware Avenue, S. W., 1977.

Orlick, Terry. "Traditional Inuit Games: Looking Back to Look Forward", C.A.H.P.E.R. 43:6, 1977 (May-June).
(Describes cooperatives games of the Eskimoes.)

CONCEPT 17. Competition - Excellence

Schwank, Walter C. (ed.) The Winning Edge. Washington, D. C.: AAHPER Publications, 1974.
(Proceedings of the First National Sports Psychology conference - a practical conference for coaches concerned with "the winning edge" - contains 18 papers geared to that end.)

Film: (2) - "Sports Challenge" (a middle-aged man trying to rise to the challenge of sport finding his own level of excellence.)
9 minutes. Color.

RESOURCES

CONCEPT 18. Leadership

Subconcept A. Coaching

Fisher, A Craig. Psychology of Sport. Palo Alto, California: Mayfield Publishing Co., 1976.
(Covers a wide variety of topics of interest in coaching - affiliation, motivation, aggression, personality.)

Film: (2) - "Coaches" (Observes four Canadian Olympic coaches in action.)

Subconcept B. Officiating

Bunn, John W. The Art of Officiating Sports. Englewood Cliffs, N. J.: Prentice - Hall, Inc., 1968.
(Discusses officiating in general and covers the officiating of a variety of sports.)

Subconcept C. Organization

Resick, Matthew C. Modern Administrative Practices in Physical Education and Athletics. (2nd ed.) Reading, Mass.: Addison - Wesley Publishing Co., 1975.
(Text and Case Studies Workbook.)

CONCEPT 19. Participation

NOTE: Resources for the specific sports of the Commonwealth Games are included in the Physical Education Resource Book (See Appendix C for breakdown and page numbers of topics). Some additional printed resources are outlined here for the Commonwealth Sports along with a comprehensive list of films available for most sports competed in at sports festivals. After each film is the number of the source for the film (see page 69 for list of sources.)

In addition, slide packages for each of the eleven Commonwealth Games Sports are available from the Commonwealth Games Office, Edmonton, Alberta. (C.G. designates a Commonwealth Games sport.)

1. General

Armbruster, D. A., F. F. Musker, and D. Mood. Basic Skills in Sports for Men and Women. (6th ed.) Saint Louis: The C. V. Mosby Co., 1975.
(Basics of 30 different sports.)

Seaton, D. C., J. A. Clayton, H. C. Leiber, and L. L. Messersmith. Physical Education Handbook. (6th ed.) Englewood Cliffs, N. J.: Prentice - Hall, Inc., 1974.
(Basics of 26 different sports.)

2. Archery

Film: (3) - 1 film available.

3. Athletics (C.G.)

Doherty, J. Kenneth. Modern Track and Field. (2nd ed.) Englewood Cliffs, N. J.: Prentice - Hall Inc., 1963.

Films: (2) - "What Are Your Running For" (42 mile relay race) 38 minutes Color.
(4) - "Sprinter"
"Summer Rendezvous: (many events shown) 30 minutes Color.
(3) - 53 films available.

RESOURCES

4. Badminton (C.G.)

Films: (2) - "Badminton" 13 minutes Color.
(3) - 2 films available

5. Baseball

Films: (3) - 3 films available
(4) - 6 films available

6. Basketball

Films: (3) - 13 films available, plus 9 film loops
(4) - 6 films available

7. Bowls (C.G.)

Know the Games Series. Bowls. E. P. Publishing Ltd., Bradford Road, East Ardsley, Wakefield, West Yorkshire, England, WF3 2JN.

8. Boxing (C.G.)

Films: (2) - "Golden Gloves" 28 minutes Color.
(4) - "Boxing for Boys" 9 minutes B.W.

9. Cross Country Skiing

Films: (4) - "Cross Country Skiing" 30 minutes Color.
(2) - "Cross Country Skiing" 6 minutes Color.

10. Cycling (C.G.)

    Films: (2) - "60 Cycles" (international road race) 16 minutes Color.
    (4) - "Bicycle Safety" 11 minutes B.W.

11. Curling

    Film: (2) and (4) - "Gone Curling" 10 minutes Color.

12. Equestrian

    Film: (2) - "Centaur" 10 minutes Color.

13. Fencing

    Film: (2) - "Sabre and Foil" 7 minutes B.W.

14. Figure Skating

    Films: (2) - "Figure Skating" 14 minutes color 80 film loops available.
    (3) - 1 film available.

15. Football

    Films: (3) - 8 films available plus 9 film loops.
    (4) - 6 films available.

16. Golf

    Films: (3) - 11 films available.

17. Gymnastics (C.G.)

Films: (2) - "A Piece of Cake" 15 minutes Color.

(4) - "Application of Basic Movement Principles" 30 minutes B.W.
"Russian Gymnasts" 25 minutes B.W.

18. Handball and Racquetball

Films: (4) - "Fun and Fundamentals of Racquetball" 18 minutes Color.

(3) - 7 films available.

19. Hockey

Films: (3) - 16 films available.

(4) - 6 films available.

20. Judo

Film: (2) - "Judoka" 18 minutes B.W.

21. Lacrosse (C.G.)

Films: (2) - "Learning Lacrosse" 27 minutes B.W.

(2) and (4) - "Lacrosse" 14 minutes Color.

(3) - 4 films available.

22. Outdoor Education

Films: (4) - "Paddle and Portage" 14 minutes Color.
"Snowshoeing" 12 minutes Color.

(3) - 14 films available

23. Rowing

Film: (2) - "Half - Half - Three quarters - Full" 8 minutes Color.

24. Shooting (C.G.)

Burke, Desmond T. Canadian Bisley Shooting. Oakville, Ontario, 1970.

Hartmann, Barney. Hartmann on Skeet. Toronto: McClelland and Stewart Ltd., 1967.

25. Skiing

Films: (2) - "Ski" 14 minutes Color.
"Flight in White" 15 minutes Color.
"Learn to Ski" 14 minutes B.W.

(3) - 6 films available.

26. Soccer

Films: (4) - "Football Association Cup Final, 1971" 18 minutes Color.
"Fundamentals of Soccer" 13 minutes B.W.

(3) - 2 films available.

27. Softball

Film: (3) - 3 films available.

28. Swimming and Diving (C.G.)

Canadian Red Cross Society. National Instructor Guide and Reference. (5th ed.) Toronto: Canadian Red Cross Society, 95 Wellesley Street, East, 1977.

Counsilman, James E. The Science of Swimming. Englewood Cliffs, N. J.: Prentice - Hall, 1968.

Fairbanks, Anne R. Teaching Springboard Diving. Englewood Cliffs, N. J.: Prentice - Hall, 1963.

Smith, Murray. "Teaching Beginning Swimming" and "Teaching Beginning Diving". Obtainable from Departments of Physical Education or Movement Education, Faculty of Physical Education and Recreation, University of Alberta.
(Excellent ideas for teaching beginning swimming and diving.)

Films: (2) - "Be Water Wise" 13 minutes Color.
"Aqua Rondo" 10 minutes Color.
"Olympic Swimmers" (1964) 28 minutes B.W.

(4) - "Diving Fundamentals" 11 minutes B.W.
"Springboard Techniques" 10 minutes B.W.

(3) - 19 films available plus 9 film loops.

(1) - 12 films available.

29. Table Tennis

Films: (2) - "Game in 21 Points" 11 minutes Color.
"Ping Pong" 13 minutes Color.

30 Tennis

Films: (4) - "Fundamentals of Tennis" 20 minutes B.W.

(3) - 13 films available.

31. Volleyball

Films: (2) - "The Name of the Game is Volleyball" 10 minutes Color.

(3) - 3 films available.

32. Weightlifting (C.G.)

(See Physical Education Resource Book).

33. Wrestling (C.G.)

Boring, Warren J. Science and Skills of Wrestling. Saint Louis: C. V. Mosby Co., 1975.

Garvie, Gordon T. Let's Wrestle: A Handbook for Young Wrestlers and Instructors. Galt: Collier - Macmillan Canada Ltd., 1972.

Gianakaris, George and Frank Damico. The Handbook of Wrestling Drills. New York: A.S. Barnes and Co., 1976.

RESOURCES

Films: (2) - "Wrestling" (professional wrestling) 28 minutes B.W.
(4) - "Wrestling: Basic Skills" 33 minutes Color.
(3) - 22 films available.

RESOURCES

CONCEPT 20. Movement Appreciation - Spectatorship

Subconcept A. Knowledge of Rules and Officiating

Bunn, John W. *The Art of Officiating Sports*. (3rd ed.) Englewood Cliffs, N. J.: Prentice - Hall, Inc., 1968.
(Discusses officiating in general and covers the officiating of a variety of sports.)

Diagram Group. *Rules of the Games*. New York: Paddington Press Ltd., 1974
(An excellent outline of the official international rules of the world's major sports.)

Subconcept B. Knowledge of Skills

See Concept 19 - Participation.

Subconcept C. Knowledge of Tactics and Strategy

See Concept 19 - Participation.

Subconcept D. Knowledge of Performers and Performances

Cosentino, Frank, and Glynn Leyshon. *Olympic Gold: Canadian Winners of the Summer Games*. Toronto: Holt, Rinehart and Winston of Canada, Ltd., 1975.
(Canada's medal winners 1904 - 1972)

Wise, S. F., and Douglas Fisher. *Canada's Sporting Heroes*. Don Mill, Ontario: General Publishing Co., Ltd., 1974.

Films: (2) - "Judoka" (Canadian - Doug Rogers) 18 minutes B.W.
"King of Blades" (Canadian figure skater - Don Jackson) 18 minutes Color.
"Runner" (Canadian long distance runner - Bruce Kidd) 11 minutes B.W.

RESOURCES

Subconcept G. Knowledge of History and Development of Sports

Arlott, John. The Oxford Companion to Sports and Games. London: Oxford University Press, 1975.
(An introduction and history of all sports and games competed in nationally or internationally.)

Avedon, Elliott M., and Brian Sutton - Smith. The Study of Games. New York: John Wiley and Sons, Inc., 1971.
(The history and origin of games from many different countries.)

General Encyclopedias (Most contain brief histories of sports.)

Menke, Frank G. The Encyclopedia of Sports. (3rd ed.) New York: A. S. Barnes and Co., 1963.
(The complete history of nearly eighty sports.)

NOTE: Many books have been written on the history of specific sports. Consult the local library. Some examples follow:

Burke, Edmund. The History of Archery. London: Heinemann, 1957.

Fleisher, Nat, and Sam Andre. A Pictorial History of Boxing. Secaucus, N. J.: The Citadel Press, 1975.

Quercetani, R. L. A World History of Track and Field Athletics. London: Oxford University Press, 1964.

Smith, Robert A. A Social History of the Bicycle. New York: American Heritage Press, 1972.

RESOURCE

CONCEPT 21. Cultural Understanding

Subconcept A. Folk Dances

Bhavnani, Enakshi. The Dance in India. Bombay, India: D. B. Taraporevala Sons and Co., 210, Dr. N. Naoroji Rd., 1965. (Excellent descriptions and illustrations of Indian classical and folk dances.)

Bowers, Faubion. The Dance in India. New York: Columbia University Press, 1953. (Description of classical and folk dances of India.)

Government of New Zealand. Games and Dances of the Maori. Wellington, New Zealand: Government Printer.

Harris, Jane A., Anne Pittman, and Marlys S. Waller. Dance a While. (4th ed.) Minneapolis, Minnesota: Burgess Publishing Co., 1968. (Excellent background information and instructions for folk dances from a variety of countries.)

Lidster, Miriam D., and Dorothy H. Tamburine. Folk Dance Progressions. Belmont, California: Wadsworth Publishing Co., 1965. (Excellent bibliography of dances from England, Ireland, Scotland, Wales.)

Mynatt, Constance V. and Bernard D. Kaiman. Folk Dancing for Students and Teachers. (2nd ed.) Dubuque, Iowa: Wm. C. Brown Co., 1975. (A good variety of nationalities.)

Subconcept B. National Games

Gomme, Alice B. The Traditional Games of England, Scotland, and Ireland. New York: Dover Publications Inc., 1964.

Government of New Zealand. Games and Dances of the Maori. Wellington, New Zealand: Government Printer.

Harbin, E. O. Games of Many Nations. New York: Abingdon Press.

Hunt, S. E., and E. Cain. Games the World Around. New York: Ronald Press Co., 1941.

I.C.H.P.E.R. I.C.H.P.E.R. Book of Worldwide Games and Dances. Washington, C. C.: International Council on Health, Physical Education, and Recreation, 1201 Sixteenth Street N. W., 1967.

Jernigan, Sara S., and C. Lynn Vendien. Playtime: A World Recreation Handbook. New York: McGraw - Hill Book Co., 1972.
(Excellent coverage of most countries and areas of the world.)

Know the Game Series. Cricket, Croquet, Netball, Rounders, Rugby. Wakefield, West Yorkshire, England: E. P. Publishing Ltd., Bradford Road, East Ardsley, WF3 2JN.
(Excellent concise pictorial explanations of the rules of these British games.)

MacFarlane, Allan, A. Book of American Indian Games. New York: Association Press, 1958.

Vinton, Iris. The Folkways Omnibus of Children's Games. Pennsylvania: Stackpole Co., 1970.

Films: (4) - "A Look at Umpiring" (umpiring the game of cricket) 20 minutes Color.

(2) - "Race of the Snow Snakes" (An ancient game of the Iroguois) 8 minutes Color.
"The Second Arctic Winter Games" (includes Eskimo Sports) 28 minutes Color.

Appendix A

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APPENDIX A

SAMPLE OF A BADMINTON LESSON, USING THE CONCEPTUAL APPROACH [7]

1. Select a partner and find a space on one of the courts in which to work. Partners should be on opposite sides of the net. We are going to explore the production of maximum force in badminton. One player starts the shuttlecock in play in any manner desired and sends it as high and deep over the net as possible. His partner returns the shuttlecock, directing it high and deep. Play continues in this manner for as long as possible. Think about the actions you are using to produce maximum force to send the shuttlecock high and deep.
   - A. Practice with your partner.
   - B. Discussion: Which grip did you utilize as you contacted the shuttlecock? (Students should recognize that the forehand grip is used for shuttlecocks approaching on the racket side of the body and the backhand grip is used for shuttlecocks on the non-racket side.)

2. As you continue to send the shuttlecock as high and deep as possible, listen as you contact it. Does your racket make any noise? Should it?
   - A. Practice with your partner.
   - B. Discussion: Did you hear any noise as you contacted the shuttlecock? What does a swishing sound indicate? (Students should understand that for maximum force to be produced the racket arm must be moved very quickly. If wrist action is used to increase the speed of the racket arm, a swishing sound is heard.)

3. Now see if you can detect the effect that a backswing has on the force produced. Using either an overhand swing or an underhand swing, send the shuttlecock high and deep. Try to accomplish this by using a very small backswing. Then try to use the largest backswing possible. Remember to listen for the swishing sound. Do you hear a greater swish when you use a large or small backswing? Which backswing allowed you to send the shuttlecock the greatest distance? Why did it?
   - A. Practice with your partner.
   - B. Discussion: With which backswing were you most successful in imparting maximum force (i.e., sending the shuttlecock high and deep)? Why? (Discussion should focus upon the range of motion of the lever arm. Students should realize that a larger backswing provides a greater distance in which to develop the speed of the lever arm. For an overhand stroke the racket should be brought behind the head and between the shoulder blades as if scratching the back.)

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[7] Seidel, Beverly L., Fay Biles, Grace Figley, Bonnie Neuman. Sports Skills: A Conceptual Approach to Meaningful Movement. Dubuque, Iowa: Wm. C. Brown Co., 1975.

4. Again direct the shuttlecock as high and deep as possible. Try to use just an overhand swing. See if you can determine where in relation to your body the shuttlecock was contacted for hits which went high and deep. Did you contact the shuttlecock in front of your body, directly overhead, or behind your body? Watch your partner. Where do you see him contacting the shuttlecock? Was the point of contact different for hits which did not go both high and deep?

   A. Practice with your partner.
   B. Discussion:
      (1) Show where, in relation to your body, the shuttlecock should be contacted if it is to be directed high and deep. What occurs if you contact it more behind your body? Does this change the angle of the racket face and the flight achieved? What will you have to do if the shuttlecock is not coming to the position you have just indicated? (Students should recognize that the shuttlecock must be contacted as soon as possible while overhead and in front of the body. The arm should be fully extended at contact, as a longer lever allows greater force to be produced. Good footwork allows a player to reach the shuttlecock while it is still at a high level and in front of the body.)
      (2) As you've been practicing, you have used both overhead and underhand swings to impart maximum force. Which swing should you strive to use? Why? (Students should recognize that an overhand swing is offensive while an underhand swing is defensive.)
      (3) We have just learned the clear. It is one of the basic badminton strokes used to direct the shuttlecock high over the net and deep into the opponent's court. When might the clear be of value in a game situation? (Students should recognize that the clear is used to push the opponent away from the net and to allow time to regain one's court position.)
      (4) The clear requires the production of maximum force. Identify all of the actions which contribute to producing maximum force. (Students should recognize the importance of: (a) contacting the shuttlecock as soon as possible with a fully extended racket arm; (b) increasing range of motion through a large backswing; and (c) increasing the speed of the racket arm by using wrist action.)

Note: At this point a practice situation for the clear is advisable. The practice should be modified for those who are experiencing difficulty and made more challenging for those who are successful. As students are able to execute the clear, they may progress to exploring the production of minimal force (the drop) in order to hit to an open space.

Appendix B

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APPENDIX B

CLASSIFICATION OF SPORTS

	COMMONWEALTH GAMES SPORTS	OTHER SPORTS IN SAME CLASSIFICATION	
I.	Aiming Games - Target Games Bowls Shooting	Curling Archery Golf	Shuffleboard 5 and 10 Pin Bowling Horseshoes
II.	Court Games - Net Games Badminton	Tennis Table Tennis Racquetball Squash	Volleyball Deck Tennis Handball
III.	Running and Passing Games - Goal Games Lacrosse	Basketball Field Hockey Ice Hockey Team Handball Rugby	Football Soccer Floor Hockey Water Polo Speedball
IV.	Field Games - Batting and Running Games	Baseball Softball	Rounders Cricket
V.	Body Mastery Sports Athletics Cycling Gymnastics Swimming and Diving Weightlifting	Dance Downhill Skiing	Cross Country Skiing Skating
VI.	Combatives Boxing Wrestling	Self Defence Karate	Judo Fencing

Appendix C

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APPENDIX C

PHYSICAL EDUCATION RESOURCE BOOK INDEX

	Understanding the Sport	History	Rules and Officiating	Skills	Organization of Competition	Performers and Performances	Participation Opportunities in Alberta	Resources
Athletics	9*	9	17	13	14	155	18	19
Badminton	23	23	28	26	26		30	35
Bowls	40	39	43	41	43		47	48
Boxing	51		52	51	51			54
Cycling	57	57	58	58	58			61
Gymnastics	65	65	72	67	70		73	74
Shooting	79 - 92	(7 events are described in detail)				89		
Swimming	96	95	98	97	98	101	100	
Diving			107	105	107	109	108	
Weightlifting	114	113	117	116	116	121	118	119
Wrestling	127	128	131	128	129		133	136
Lacrosse	142	141		146	Demonstration Sport			149

* The number (eg. 9) refers to the page number in the Physical Education Resource Book.

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